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Official WLTP fuel consumption figures for the Audi S line Range in mpg (l/100km) from: Combined 34.0 (8.3) – 55.4 (5.1).
tested to the same technical procedures. These figures may not reflect real life driving results, which will depend upon a number of factors including the accessories fitted (post-registration),
designed to be equivalent to the outgoing (NEDC) test cycle and will be used to calculate vehicle tax on first registration. For more information, please see audi.co.uk/wltp or consult your Audi Centre.
information. Figures relate to stock vehicles only. The range figures shown are based on the official fuel consumption and CO_2 emissions of the Audi A3 Sportback S line, A5 Coupé S line and

NEDC equivalent CO_2 emissions: 154 – 114g/km. Figures shown are for comparability purposes; only compare fuel consumption and CO_2 figures with other vehicles variations in weather, driving styles and vehicle load. There is a new test used for fuel consumption and CO_2 figures (known as WLTP). The CO_2 figures shown however, are based on a calculation Data correct at 17 September 2019. Figures quoted are for a range of configurations and are subject to change due to ongoing approvals/changes. Please consult your Audi Centre for further A6 Avant S line models. Image for illustrative purposes only.

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VAUXHALL

Fuel economy and CO_2 results for the Vauxhall Corsa-e 100KW (136PS). Mpg (l/100km): N/A. CO_2 emissions: 0g/km. Electric range up to 205 miles (WLTP).

The Corsa-e is a battery electric vehicle requiring mains electricity for charging. Range data given is preliminary and has been determined according to WLTP test procedure methodology (R (EC) No. 715/2007, R (EU) No. 2017/1151). EG type approval and Certificate of Conformity are not yet available. The preliminary values might differ from official final type approval data. Everyday use may differ and is dependent on various factors. In particular: personal driving style, route characteristics, exterior temperature, heating/air conditioning, pre-conditioning and battery condition.

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COMMENT

THE END OF FOUR-WHEELED FUN? NOT IF WE HAVE ANYTHING TO DO WITH IT

NOT ALL CHANGES in the automotive industry have been for the better, as the unnecessary demise of the likes of city cars and diesel shows. Inaccurately advised legislators don't help, doing their best to take the joy out of driving, even on our increasingly busy but under-resourced roads.

So you'd be forgiven for thinking that the world was conspiring against those who seek only the chance to have simple fun and pleasure with cars, and a choice of what to buy.

But this is Autocar, and we love cars as much as you do – and know that they combine joy, interest and enthusiasm like nothing else. This special issue, where we diversify our coverage even more into the world of cars, is hopefully a reinforcement of the pleasure that can be had on all things with four wheels. Or sometimes two (p106) and occasionally even 16, as the tank you can test drive and then buy yourself (p56) shows.

While this is a festive-themed issue, I'll stop short of wishing you a happy Christmas here, as we'll be back on Tuesday 24 December.

Should you happen to be stuck for a Christmas gift idea, we have the perfect solution on p24: an Autocar subscription. Start dropping hints to your loved ones now...

Mark Tisshaw Editor
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CARS OF THE YEAR
Our testers assemble their choices and hash it out over lunch, p34

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NAUGHTY AND NICE
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NEWS

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Audi Sport to go electric with RS-branded E-tron GT

Sister to Porsche Taycan one of four electrified Sport models in development

E-tron variant of the current R8 is expected next year

> “The E-tron GT will be offered with the same three powertrain choices as traditional Audis”

The E-tron GT is set to be offered in base, S and RS forms

Audi Sport is ramping up its electrification offensive under new management, and will next year introduce the RS branding to a battery-powered model in the form of the production E-tron GT saloon.

The sister model to the Porsche Taycan, set to be offered in regular, S and high-performance RS trims throughout its existence, is also likely to be joined by an RS version of Audi’s recently revealed E-tron Sportback. A number of plug-in hybrid RS models are also on the cards, while a new E-tron version of the current-generation R8 is tipped to appear next year as a prelude to a possible all-electric R8 replacement in a few years’ time.

The plan for the Audi Sport division to embrace hybrid and electric propulsion has been devised under the joint management of directors Oliver Hoffmann and Julius Seebach. Expanding into new EV and PHEV markets is the priority now the division’s SUV offensive is well under way; this year it has launched the RS Q3 and RS Q3 Sportback, the diesel-powered SQ5 and both SQ8 and RS Q8 range flagships.

Speaking at the recent Los Angeles motor show, Seebach confirmed that the E-tron GT – revealed in concept form at last year’s LA show and later driven by Autocar (First Drives, 27 December 2018) – will be offered with the same three powertrain choices as traditional Audi models, such as the A6, S6 and RS6.

The concept E-tron GT featured a dual-motor, all-wheel-drive electric powertrain making 582bhp and around 600lb ft. A 96kWh battery gave a claimed range of 250 miles, with 0-62mph quoted in 3.5sec. The production version, which will make its debut at next year’s LA motor show, will share its J1 electrical architecture with the Taycan, but it’s not clear if the Porsche’s three-variant line-up, comprised of the 523bhp 4S, the 670bhp Turbo and 751bhp Turbo S, will transfer over with identical specs.

More likely is that the base E-tron GT will start at a lower output, and therefore a lower price point, than the base Taycan. Both cars will use the same 800V electrical architecture, however, and weigh about the same. Expect standard and S models at launch, with the RS arriving slightly later.

Seebach also confirmed that, as Autocar first reported in September, plug-in hybrids are formally under development by Audi Sport’s engineers. The powertrains will be introduced on the next generation of RS models, and it is understood that the first Audi RS model to be offered as a PHEV will be the next-generation RS4.

That car will compete head to head with the next Mercedes-AMG C63, which, as confirmed in October, will ditch the current car’s V8 in favour →

Next RS4 will be offered as PHEV

RS E-tron Sportback SUV would rival Tesla Model Y Performance

> "A third electric motor would significantly increase the E-tron SUV's peak outputs"

← of a 500bhp-plus plug-in hybrid four-cylinder powertrain. It will also be four-wheel drive, challenging Audi Sport's long-established quattro system when it arrives in early 2022. Expect the new RS4 to arrive slightly later, given that the current model only went on sale last year.

Speaking separately at the LA motor show, Audi's exterior design boss Andreas Mindt said his team is "absolutely" considering introducing the RS branding into the E-tron Sportback SUV for an ultra-fast variant aimed at the upcoming Tesla Model Y Performance.

Discussing the potential for an RS E-tron Sportback, Mindt said: "It's very similar to what you see with the RS Q8. You have to start with the standard car and build it up."

Such a model would carry over the classic RS design principles of big wheels and an aggressive bodykit to help differentiate, while changes to the chassis and steering will also be introduced. In a theoretical sense it's relatively easy to turn up the wick for the electric motors, which in the standard E-tron Sportback together put out 402bhp in the most powerful Boost mode.

One possibility already hinted at is the introduction of a third electric motor, which would not only significantly increase peak outputs but also allow torque to be apportioned across each individual rear wheel for more neutral handling qualities.

A timeframe for a performance Audi E-tron SUV is unconfirmed, but prototypes of a standard-bodied E-tron with uprated, lowered suspension have been seen lapping the Nürburgring since May. It's possible we'll see something previewed next year for introduction in 2021.

Before all this, however, it is understood that Audi will revive the all-electric R8 E-tron as an upgraded model to go into limited production once again late next year. The brand first presented a second-generation version of the pure-electric supercar in 2015, but production was canned around 16 months later due to extremely slow demand. A price tag of around £850,000 was considered to blame for Audi only producing 100 examples in that period.

Details of the new car have yet to be made official, but it is expected that it will look broadly similar to the 2015 car (see previous page). That model used a dual-motor EV powertrain, mated to a 92kWh battery, putting out 456bhp and 679lb ft for a 0-62mph time of 3.9sec and a promised range of up to 280 miles. Substantial developments of EV powertrains over the past four years mean that a power increase is likely, but the focus for Audi will be to bring the model's price down to a more reasonable figure. Nevertheless, it is not expected that the revived R8 E-tron will be any more than a limited-production model.

LAWRENCE ALLAN

Q&A ANDREAS MINDT, AUDI EXTERIOR DESIGN BOSS

We're seeing a lot of new electric supercars. Does this appeal to Audi?

"The E-Tron GT is a first step in this direction. I can imagine steps like this. Let's see what happens – there are great chances. The energy in the battery is limited at the moment, so you need a jump in technology for [supercars]."

How are you developing the styling of electric cars?

"We have a big decision to make on how EVs look. It's a myth that electric cars don't need cooling and they don't need a face – it's not true. The battery and motor with this level of performance needs the cooling. It's also a myth that electric cars need a short bonnet and a long A-post. If you do that, the dashboard gets bigger and you have more heat inside the car from the size of the glass windscreen. Then you can't get the heat away as the energy management in an electric car is very low. To that, a Defender is a good design for electrification..."

And what will they look like?

"Our belief is to invert everything, with the grille and the grille surround. So the grille isn't a black hole any more. The volume inside the grille instead shows the battery is bright, and then the surround is a black mask around it. Being black means we can hide the sensors in there, and it's not easy to hide sensors. This is very clever. You can still recognise it as an Audi even at 100 metres."

Audi had one of the most innovative concepts of 2019 with the AI:Trail. Will you keep creating concepts like this?

"We want to be progressive. The AI:Trail was very futuristic. People either loved it or hated it. We wanted to go to the future and show what could be done thinking differently. It's like a helicopter on four wheels, like sending something sneaking through the forest rather than a 4x4 to smash through the terrain. It's the opposite to the norm. Off-roaders are ideally suited to EVs; there is no gearbox and you always have low torque."

THE 3

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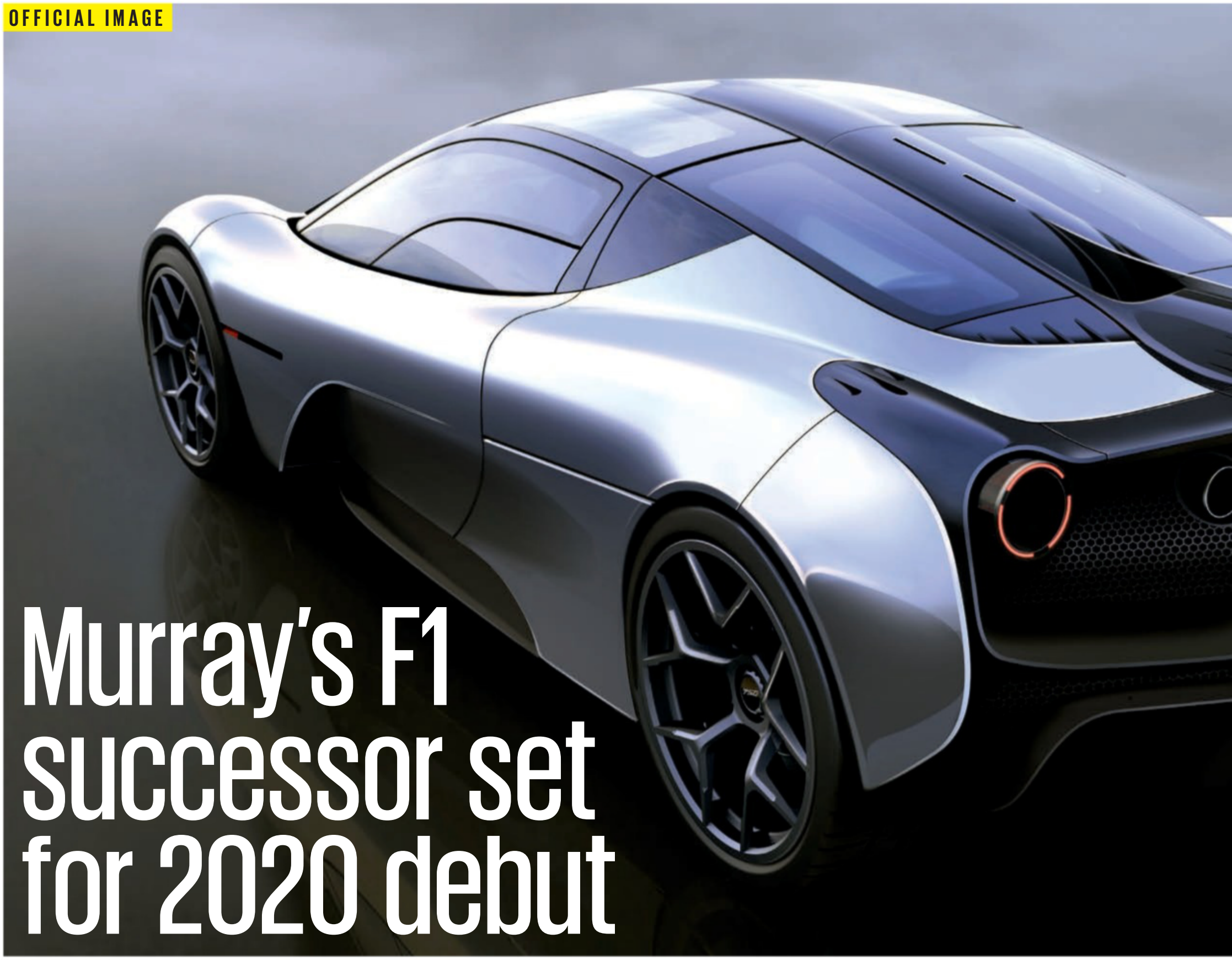


Murray's F1 successor set for 2020 debut

Radical £2.3m three-seat 'fan car', with a 12,400rpm V12, will be launched next May

Gordon Murray plans to unveil a production-spec version of his revolutionary T50 ground-effect 'fan car' in May.

The £2.3 million 'analogue' hypercar, to be built at Murray's new Dunsfold factory, will move immediately after launch into a prototype build and development phase, before production build-up begins during 2021.

The first of the planned 125 cars – 100 road cars and 25 purely for the track – will reach its new owner at the beginning of 2022 and production will continue for a year.

Under a deal just announced, the T50's all-important aerodynamics package is being developed with the assistance of the Silverstone-based Racing Point Formula 1 team, formerly Force India. Access to the team's moving-floor wind tunnel, plus the expertise of its F1-trained technicians, will allow Murray to use large-scale models to refine the T50's revolutionary active aero package.

A three-seater with a central driving position, the car combines the unique qualities of Murray's two most iconic creations in a stellar 50-year, 50-car career: the seminal, ultra-light McLaren F1 three-seat supercar of 1992 and the Brabham BT46B grand prix 'fan car' of 1978, whose extraordinary levels of downforce briefly stood F1 on its head and took one race win before the team withdrew it in the face of opposition from rivals.

The new T50's most striking feature is a 400mm rear-mounted electric fan, designed to extract air rapidly from beneath the car, radically increasing downforce and grip. The aero set-up can be configured in six different modes, two of them automatic, the rest driver selectable. They vary from the super-slippery Streamline mode to the High Downforce setting, for use when exceptional stability and traction are needed.

The first details of the T50 emerged last summer, when it became clear that it would use much of the packaging and technology of the F1, simply because, in Murray's view, there isn't a better way of doing it. The car has an all-new carbonfibre tub and is powered by a bespoke mid-mounted normally aspirated 4.0-litre V12, built by Cosworth, producing around 650bhp.

The engine revs to 12,100rpm, with a 12,400rpm hard limit, which will make it the highest-revving road car engine yet built. Experimental versions are running at full speed on the dynamometer and said to be producing exhaust notes whose quality

Murray's F1 is a crucial influence

FORD ANNOUNCES MK3 KUGA PRICES

Ford's third-gen Kuga will start from £23,995 in Zetec trim with a 1.5-litre turbo petrol engine. First Edition variants will be prioritised for deliveries early next year. The new, 222bhp plug-in hybrid is available from £33,095 in Titanium trim.

RISING EV SALES BUCK MARKET TREND

Hybrid and fully electric models had a record market share of 10.2% in November, despite a shrinking UK car market. Over 16,000 hybrids or EVs were registered, with battery-electric vehicles up 228%. Diesel's share fell to 23.6%.

Official image shows the T50’s prominent rear-mounted fan

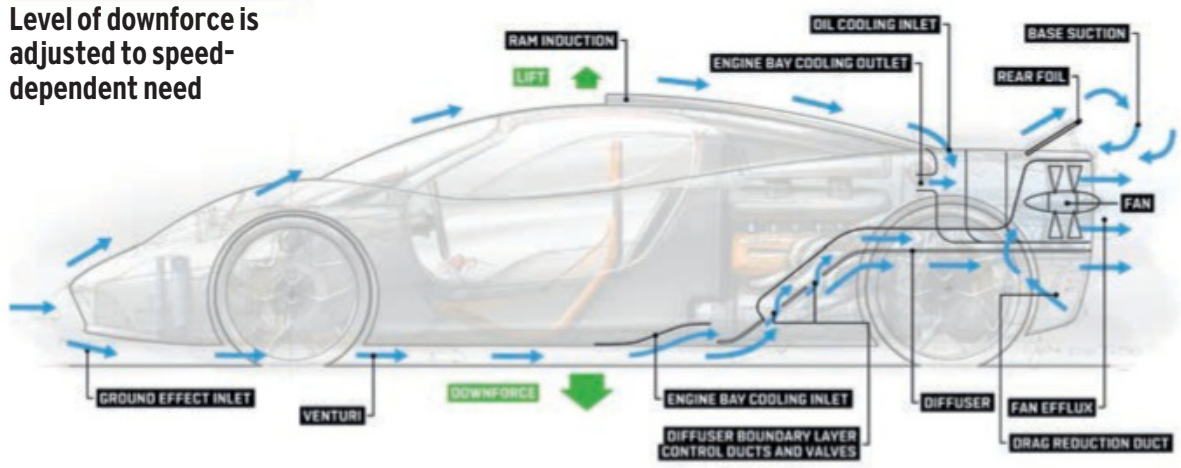
WHY THE FAN MAKES SO MUCH SENSE

Aerodynamic downforce is a great thing to have when you need it, explains Gordon Murray, and that’s principally between 60mph and 100mph, the point at which your car benefits most from greatly enhanced cornering adhesion. It would be nice to have downforce that works lower down, too, but passive aero gadgetry doesn’t provide it.

When going faster, you could often do with less aero effect. “Aerodynamic load rises as the square of speed,” Murray says, “and so does drag. Which means many cars with serious performance use up their suspension travel at high speed, which is about the last thing you need. You can reduce it with expensive, bulky variable-rate complexity, but who wants that?”

All of which, in a nutshell, makes the case for the T50’s brand of variable, fan-based downforce. It can be strong at 30mph. (Murray says the T50 sucks hard enough at full-fan speed to stick itself to the ceiling.) But the system is tunable and delivers exactly as you want it to. You can use it to help stop your car from seriously high speeds. And you can adjust it for decent stability yet good ride quality while cruising autobahns at 150mph. In short, it looks like one of those things, once explained, that every serious future fast car will need.

Level of downforce is adjusted to speed-dependent need



Use of fan for aero will allow bodywork to look ‘pure’ and uncluttered

very much matches the high output.

At the front of the engine, a 48V integrated starter/generator connects directly with the crankshaft. It acts as a starter motor, then converts to a generator to produce the power needed to spin the lightweight fan at speeds of up to 8000rpm.

The V12 is mounted very low in the T50’s all-carbonfibre tub, driving the rear wheels through a six-speed H-pattern manual gearbox built by Xtrac. Murray says most buyers are “relieved” by the presence of a proper stick shift, but he directs those who prefer paddles to the 25 late-build track cars, which will probably use them.

In another nod to traditional driving, the T50 avoids hybrid technology: Murray says it would increase kerb weight far beyond the current figure of just 980kg, with many knock-on disadvantages. He wants the T50 to be seen as the spiritual successor to the F1 in its lightness, compactness and space efficiency, with those properties all enhanced by the use of modern materials and techniques.

The T50 is just 30mm wider and 60mm longer than the F1, having about the same road footprint as a Volkswagen Golf. “No one else makes supercars our way,” said Murray. “I’m happy about that.”

The car needs very little obvious upper-body aerodynamic addenda, allowing for a purer front-end shape. Although the frontal styling has yet to be revealed, Murray says its relationship to the F1 will be clear.

Downforce is generated either by an active tail spoiler or via a large venturi beneath the body, a system of slots and ducts with the 400mm fan at its rearmost extremity. The feed of underbody airflow can be varied by the opening or closing of slots ahead of it.

The T50’s two automatic aero modes are Auto (which optimises use of the fan, the rear spoiler and the underbody diffusers) and Brake (which opens the spoilers and runs the fan at high speed, sucking the car onto the road and increasing both stability and rolling resistance).

The driver-select aero modes are High Downforce and Streamline, which cuts drag by about 10% by closing underbody vents and speeding the fan to create a ‘virtual longtail’. There’s also a Vmax mode, a kind of ‘push to pass’ setting that adds 30bhp for up to three minutes. Near the top speed, the ram effect of a roof-mounted induction air scoop (a Murray favourite) boosts power to about 700bhp. The final aero mode is Test, which allows an owner to demonstrate the functioning of the aero system when the car is stationary.

Most T50s are already sold, although there are still “a few” opportunities for buyers. Murray said he is pleasantly surprised at the comparative youth of the latest crop of buyers: 40% are under 45 and three are buying their first-ever supercar. “People tell us the McLaren F1 was their poster car when they were growing up,” said Murray. “Now that they’ve built successful businesses, T50 has become their F1. We’re very happy with that.”

STEVE CROPLEY

JAG UNVEILS FRENCH-FLAVOURED XE

Jaguar has revealed a special XE named in honour of the Reims-Gueux circuit in France. Priced from £38,295 with the P250 petrol engine and limited to 200 units, it brings back the firm’s French Racing Blue paint alongside equipment upgrades.

BMW U-TURN: APPLE CARPLAY NOW FREE

BMW has reversed its decision to charge Apple CarPlay users £85 a year, making the system free for the lifetime of the car on all models operating the latest infotainment set-up. People who have already paid will get an unlimited subscription.

Toyota sticking with city cars

Other firms may be abandoning them but Toyota is committed to a new Aygo

Toyota is hoping to capitalise on other manufacturers giving up on the city car segment with a new generation of the Aygo – and it could adopt SUV-inspired styling cues.

Speaking to Autocar at the recent reveal of the new Toyota Yaris, executive vice-president of Toyota Europe Matt Harrison said the current Aygo is a “profitable business equation for us” – a statement that cannot be applied to rivals from the Volkswagen Group and the PSA Group.

“We have an awful lot of equity in Aygo,” Harrison said. “We’re selling 100,000 a year. It’s got a personality all of its own so it gives to the brand rather than takes away. It’s the most relevant car for a young audience so it’s the access point of the brand...

“I understand other manufacturers have not been able to make a successful business out of [the] A-segment and, with increased technologies, they only see it getting worse. But we see it as an opportunity to go further, not pull back.”

Harrison’s comments are an anomaly among mainstream car manufacturers, whose own A-segment city cars have been put under increasing pressure by a number of factors – notably, extremely tight margins and the need to introduce electrification, in an unprofitable way, to ensure the models aren’t problematic in the upcoming fleet average CO_2 regulations for 2021.

“Our hybrid mix will carry us through the 2021 commitments. Many manufacturers are rushing because they don’t have hybrids and are facing some pretty eye-watering penalties,” said Harrison.

However, he acknowledged that the “business equation isn’t quite there yet” for fully electric vehicles to enter the mainstream small car segment. “We can take a little bit more time to wait for the maturity of the tech and the business equation and see

Aygo (above) is selling well and Toyota is subject to less CO_2-reduction pressure than other firms, a factor that will enable it to replace the GT86 (middle) and Land Cruiser

Next-gen Aygo is tipped for 2021/22 as a high-riding model

where consumer demand is shifting," he said.

This suggests Toyota is developing the next-generation Aygo so it can be adapted quickly to use an electrified powertrain if a more pronounced market shift occurs. However, the next Aygo is still expected to be launched with a small, light and low-cost combustion engine first.

Harrison has also previously hinted that "less traditional bodystyles" could be brought in to the model to capitalise on the latest consumer trends. A crossover-style focus is likely, with a raised ride height and seating position becoming increasingly desirable in towns and cities. Don't expect to see anything until at least 2021 or 2022, though, given the long lifespan of the last-generation Aygo.

An acknowledgement of the costs of electrification means that, despite Toyota planning to sell one million EVs globally by 2025, a small low-cost electric Toyota is some way off. "The small car segment is all about affordability," said Harrison. "We don't see that as being optimal for full electric. When you look at the price of a [Peugeot] 208 EV, it's way outside the B-segment and that doesn't fit our customers' requirement of affordability."

However, Harrison did confirm that there will be three electric Toyotas on sale in Europe by 2021 and "more than three" by 2025.

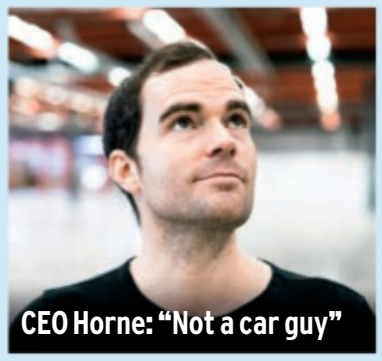
Despite the changing market, Harrison is upbeat about the future of more niche Toyotas, such as the Land Cruiser, Supra and GT86 – the last of which will receive a new generation in a joint development with Subaru and, Harrison confirmed, will be coming to Europe.

He said: "If we look at our total portfolio hybrid mix, it is very strong and that allows us to make CO_2-heavy cars. [The Land Cruiser] is a key part of our line-up and heritage. It's an icon of our range, so it's something we can accommodate in our line-up."

LAWRENCE ALLAN

Uniti aims to disrupt the car world, starting with its One EV

LIKE MANY START-UPS, fledgling Swedish brand Uniti aims to disrupt the automotive industry. Not just with the One, a three-seat electric car engineered and (initially) set to be built in the UK, but further into the future, with a business model aimed at selling the car to companies as a mobility service for its employees rather than to individual customers. We speak to the firm's CEO, Australian-born Lewis Horne, to gain an insight into his outfit's plans and the man himself.



CEO Horne: "Not a car guy"

You don't see yourself as a car enthusiast, but you're CEO of a car company. How did you end up here?

"I'm not a car guy. I'm a technology generalist. I'm pretty inspired by all of the stuff that is happening and all of the different people working to change the way the world works, which is critical. I'm somebody who doesn't like cars very much! But I do like really beautiful, clean, simple consumer electronics – like a MacBook. I think: why can't we have that in a car?"

Describe your operating model and why it's different from that used by other car companies.

"We have only shown a small portion of our plan – the business to consumer [B2C] component – but there are many more big stories to come. Our model is based on recurring revenue, not traditional sales. We're like Apple. Apple does not produce anything – they are a software, design and branding company – and that's the same operational model that we have. There are plenty of people who are great at manufacturing and we won't try to be best at that."

But you are building the cars yourself, for now?

"Yes – low-volume production in Norwich for the first couple of hundred units and we use that to parlay into bigger-volume production. It's baby steps. Is it the best place for high-volume production? I don't necessarily think making 50,000 cars in the UK is a good idea."

Why are you in the UK now, then, and specifically Norwich?

"The fundamental engineering criteria was to build a safe car that is lightweight and the UK engineers are the best in the world at that. A bunch of them are in Silverstone. A bunch happen to be in Norwich. I won't comment on any specifics of who our engineering partners are, however."

How soon will you have the Uniti One on UK roads?

"We'll certainly have cars driving around London soon. As it stands today, we can be delivering cars a whole lot sooner than mid-2020. The reason why we manage expectations is some of the added rigour that needs to go into the safety systems and the airbags and the programmes, a result of our decision to homologate it as a car and not a quadricycle."

How can you make any money from a low-volume EV that costs £15,000?

"It's not a low-volume product but we don't depend on high-volume B2C sales. The first vehicles we don't make any money with simply because we spare no expense with the details, the materials, components and so forth. I would be extremely happy if the first few hundred customers were blown away by the quality of the product, the quality of the service: that helps with the bigger picture."

Does the UK's decision to leave the EU have an impact on your business?

"We're well aware of the implications of Brexit and we're prepared for it. But we're not emotional about it. I'm aware that there are challenging things that can happen in the world but we're here to do something good. There are always challenges to overcome. There have been many, many other crippling challenges for us and there are many more to come." **LA**

Uniti One is a three-seat EV priced from £15k

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New engineering centre will inspire modern Morgans

Morgan steeled for new era

Light CX-generation chassis to replace traditional ladder frames on modern cars

Morgan will next year end production of its models built on a simple steel ladder-frame chassis, a system it introduced 83 years ago with its first four-wheeled model, called the 4/4.

In recognition of modern customers' need for greater road ability, even in traditional sports cars, the company plans to replace the outgoing models – the 4/4, Plus 4 and Roadster – with "a range of models" that will utilise versions of the light and rigid CX-generation chassis it introduced with the Plus Six early this year.

"We recognise a need for a more resolved core product that meets both our customers' needs and future legislative requirements," said Morgan CEO Steve Morris. "The advanced engineering of the new platform is a vital underpinning for the next generation of Morgan sports cars."

The chassis decision is part of a suite of changes and improvements that follow the purchase of the Malvern Link sports car company by Investindustrial, an Italian private equity firm that is also a major shareholder in Aston Martin.

Developments include the opening in a few weeks of a modern and extremely spacious engineering and development centre (dubbed M-DEC, for Morgan Design and Engineering Centre) on a new site close to its Pickersleigh Road base.

"We need space to work on new projects," said chief designer Jon Wells. "It has to be away from the suppliers and visitors who visit us nearly every day," added Morris. "So we've made it close, but separate."

Work is also about to begin on a major refurbishment of the Pickersleigh Road visitors' centre, which annually greets 30,000 people, each of whom pays £24 for an expertly guided two-hour tour. Tours will stop between now and March, but the new, improved centre will be back in action by spring next year.

For now, Morgan is extremely secretive about the exact specification of its forthcoming new models, though it is believed most will maintain Morgan's classic look. More details are likely to be available next March at the Geneva motor show, which the company traditionally attends.

Next year's offerings are understood to include a model priced below the Plus Six's £77,995, powered by a four-cylinder turbocharged engine – whose supplier is still secret – and mated to a manual gearbox. Company insiders confirm that the new car will be launched next year, though they won't yet specify date, name or price range.

The performance and all-round capability of the Plus Six has proved so good that Morgan bosses regard it as a spiritual successor for the potent Plus 8 of former times, rather than the V6 Roadster.

Morgan says it won't immediately abandon its traditional ladder chassis, however. Next year marks the 70th anniversary of the Plus 4, currently the company's biggest seller, and designers are already laying plans for a small-run special edition.

"We'll take the opportunity to mark the significance of the outgoing traditional steel chassis and its contribution to the marque," said Morris. "It has been an integral part of the Morgan story and we look forward to celebrating its significance during the year."

STEVE CROPLEY

Morgan leaders won't abandon traditional looks

JAGUAR FREE UPDATE ADDS ELECTRIC RANGE TO I-PACE

Jaguar has released an I-Pace update to add an extra 12 miles of claimed real-world range. Improved battery and thermal management software will be installed for free by dealers, with an added boost of 'Software-Over-The-Air' functionality and a more accurate range calculation.

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Customers are happy with X7's big grille, says Henrich

BMW defiant on style shift

Product boss stands by "strong characters and bold design"

BMW has received "very positive" feedback to its radical shift in styling for certain models including the X7, according to product boss Peter Henrich.

Henrich told Autocar that he was "convinced" this bold styling direction under design boss Adrian van Hooydonk was the right way to go, and that customer data showed it was being well received.

"This is crucial for success," said Henrich. "BMW customers are demanding. They want to express something and are not afraid of vehicles with strong characters. They are looking for it. So we have decided to focus even more on strong characters and bold design.

"The design team with Adrian van Hooydonk do an excellent job in designing and defining that character. The feedback received has been very positive. When first shown the X7, people said: 'How big is the kidney grille?' But customers never reacted like that and the car is a great success. It's sold out for a very long period and people love it.

"There are always people specifically looking for something critical and afraid of something new. But we are very self-confident and will continue."

When asked if BMW would apply such radical design to next-generation versions of its traditionally more conservative models such as the 5 Series, Henrich said it was important each model got its own character.

"Each car has its own positioning," he said. "In the early stages of development, we sit down – product, design and engineering – and define the character and the positioning. This is then the base for the design and engineering team. Some cars are more extroverted, more bold than others as they have different messages to transmit.

"The customer is looking for a different type of a car with a 3 Series to a Z4 or X6."

MARK TISSHAW

DESIGNERS DITCH CONTROVERSIAL GRILLE

The unusual grille of BMW's 2018 Vision iNext, which previews a large electric SUV due in 2021, has been abandoned following feedback, design chief Domagoj Dukec has revealed.

Most of the two vertical bars that separate one kidney from the other made way for the iNext's arsenal of sensors required for autonomous driving. "We test what works aesthetically," said Dukec of the iNext, which "reinvented our icons and form language. We connected the kidneys because of sensors, but we've decided not to do it. It wasn't considered to be a BMW kidney grille any more.

"The grille is critical, so the iNext, the i4 and the iX3 will get separated kidneys – we spent the money to have sensors that can see through the chrome."

F1 tycoon eyes major stake in Aston Martin

BILLIONAIRE LAWRENCE Stroll is preparing a bid to buy a major stake in Aston Martin, Autocar has revealed following a joint investigation with RaceFans.net.

Stroll, father of Formula 1 driver Lance and owner of the Racing Point F1 team, is estimated to be worth in excess of £2 billion. His reputation for building up brands and his famed car collection are believed to have given him the contacts to head a consortium looking to take control of Aston Martin by taking advantage of the brand's current low stock value. Both Racing Point and Aston Martin currently have bases at Silverstone.

DBX will be built in newly opened St Athan plant

Stroll declined to comment on the report, while Aston CEO Andy Palmer was also staying silent at the time of going to press, but he would be forced by stock market regulations to confirm if a formal takeover bid has been launched.

Aston's stock price rose by almost 20% in a day after the story went live on autocar.co.uk but remains well below the original flotation value.

Autocar understands the order books for Aston's new DBX are filling healthily, with Palmer commenting the SUV is selling "like hot cakes".

CONFIDENTIAL

MERCEDES IS predicting the Chinese car market will grow again over the next five to 10 years, despite it dropping significantly in the past 18 months. "Of all markets, it remains the place we see the biggest growth potential," said Mercedes CEO Ola Källenius. "We have been fortunate as we have not experienced a large fall, but for everyone I still see potential for expansion."

DESPITE THE resurrection of the Mazda RX-8-style rear-opening doors on the new electric MX-30, there are no plans to introduce them more broadly across the range. Brand and design boss Ikuo Maeda explained: "The idea of the MX-30 is openness, and when you step out of this vehicle, these doors help you feel that. We haven't decided if we will use these doors elsewhere but, for the MX-30, it was the best choice."

AUDI WON'T LAUNCH wireless charging in this generation of E-tron models, instead choosing to focus on class-leading fast charging. E-tron product boss Jens van Eikels said: "There is no standard in the industry [for wireless charging]. It's not so easy to find a solution for both higher and lower level cars. Charging power is less consistent – and expensive."

THE TOYOTA PRIUS isn't likely to evolve into a fully electric model, leaving a question mark over the popular hybrid's future. "It's not decided but probably unlikely," said Toyota's European VP, Matt Harrison. "It was the pioneer – our hybrid mix is where it is because of Prius – and it can still be the pioneer for new technology, but is unlikely to be full electric."

UK needs a battery gigafactory – and fast

Without it, car manufacturing currently carried out in the UK will move overseas, observers warn

The calls for the UK to gain its own 'gigafactory' to make batteries for electric cars have grown so loud over the past couple of years that it even became an election issue. Both the Conservatives and Labour have pledged to fund gigafactories, with Labour going so far as to promise £2 billion to finance half the cost of three gigafactories, to be located in south Wales, Stoke and Swindon. The Conservatives, meanwhile, promised "a gigafactory" without costing it.

Whatever the outcome of the election, it's clear the UK car industry will depend on being able to source batteries locally and soon. "Within a year, most car producers and battery manufacturers will make their decisions about where in Europe the next generation of gigafactories will be built. Without urgent action, the UK is in danger of losing out in the race," the Faraday Institute, a government-funded battery action group, wrote in a recent report.

It's also clear there are large barriers in the way. "We're in serious danger of missing out for a number of reasons," said David Bailey, professor of business economics at the Birmingham Business School. "Brexit is a serious issue and we are lagging in terms of electric vehicle take-up and infrastructure. Why would a company want to invest in a massive battery plant here?"

Labour's choice of locations was meant in part to highlight the urgency for creating new jobs. South Wales is where Ford is closing an engine factory in September 2020 and Swindon is home to Honda's engine and vehicle plant, which will shut its doors in 2021.

The UK built 2.16 million engines to the end of October, down 7% on the year before, and 60% of those were exported, according to the Society of Motor Manufacturers and Traders. However, that number will slide dramatically once the Ford and Swindon plants go offline and EV sales start to grow.

The biggest customer for a battery factory would be Jaguar Land Rover (JLR), which along with Nissan produces the largest number of vehicles in the UK. Nissan already sources its batteries from a small plant in Sunderland with the capacity to make 2GWh of cells per year (enough for around 50,000 40kWh Leafs), but batteries for hybrid Land Rovers, hybrid Toyota Corollas and electric Minis currently all come from outside the UK.

JLR has been pressing the government to act fast. "If batteries go out of the UK, then automotive production will go out of the UK," said its CEO, Ralf Speth, in July. JLR will begin to source battery packs for its planned new Jaguar XJ electric limousine from a new plant in Hams Hall near Birmingham, but it's relatively small scale and the actual cells will come from outside the UK.

Getting those cells made in the UK is crucial, both for retaining jobs and avoiding shipping heavy batteries from places like China when EV production really takes off. It's helpful, too, to avoid being hit by painful currency fluctuations and to ensure enough of the car's content is home sourced as the UK begins the process of striking its own trade agreements. The battery makes up around 40% of the cost of building an electric car, according to JLR.

Speth has made it clear that JLR can't afford to invest in a cell plant. For one thing, the process of making battery cells is far outside the core knowledge of a car company like JLR. Even early pioneer Nissan has since sold its battery operations in Sunderland and elsewhere to Chinese firm Envision Group.

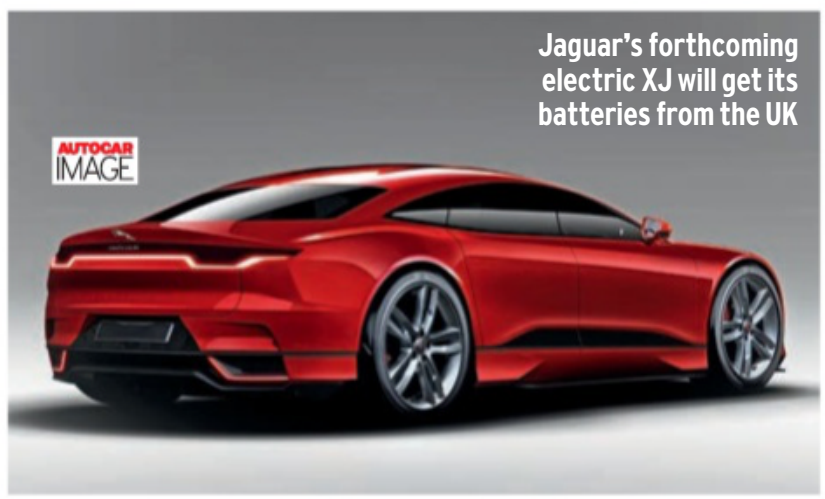
The key is to persuade an established battery maker to set up shop here, like LG Chem has done in Poland, Samsung SDI has done in Hungary and Swedish newcomer Northvolt is doing in both its homeland and for Volkswagen via a joint venture to build a plant in Salzgitter, Germany.

With Tesla skipping the UK for Berlin for its new European gigafactory and blaming Brexit for the snub, the UK is at a dangerous point while it remains in limbo in terms of its relationship to key trading partner mainland Europe.

With the EU's tough climate legislation almost mandating a shift to electric cars, a three-way agreement involving a battery maker, at least one car maker and the UK government needs to happen quickly.

Stephen Gifford, head of economics at the Faraday Institute, said: "The market is growing so fast that, while in 2019 there isn't demand for a gigafactory, in four years' time there will be. The decision needs to be made now."

NICK GIBBS



Jaguar's forthcoming electric XJ will get its batteries from the UK

Tesla is unusual in being a car maker with gigafactories

Tesla CEO Musk shunned UK to put plant in Berlin

Honda's UK plant will shut in 2021. Could an EV factory replace it?

SPY SHOT

MERCEDES-BENZ EQS

MERCEDES EQS TAKES ITS OWN STYLING ROUTE

Mercedes is working towards a 2020 Frankfurt motor show unveiling of its flagship electric model, the new EQS luxury saloon. The latest spy shots show that the Porsche Taycan rival will feature bodywork significantly altered from that of the S-Class and a wheelbase that's nearly three metres long.

UNDER THE SKIN

JESSE CROSSE

DIESEL WILL ALWAYS BEAT PETROL IN ANY EFFICIENCY DRIVE. WHY?

Diesel engines may have fallen out of favour recently but they will always be more frugal than petrol engines.

DIESEL ENGINES ARE more economical than petrol engines, which still haven't caught up despite advances like direct injection. So what exactly is the difference between petrol and diesel engines and how do diesels work? First off, diesel and petrol both come from the same source, crude oil. They're both hydrocarbon liquid fuels, but diesel does have different properties from petrol. Diesel is more dense than petrol and contains about 15% more energy by volume. That means, litre for litre, you literally get more bangs for your buck.

But that's not the whole story. Diesel engines are still far more efficient than petrol engines at converting fuel to mechanical energy. In fact, including the energy advantage of the fuel itself, diesels are up to 40% more efficient at doing that. Both types of engines are classified as 'heat' engines because they convert heat energy from fuel into mechanical energy. But diesels have better thermal efficiency than petrol engines, which means they convert more of the heat into mechanical energy and waste less of it into the environment.

Diesel engines work by compressing air so tightly in a small combustion space that it gets hot enough to ignite diesel spontaneously when it's injected. The petrol engine relies on a spark for ignition at lower compression. The higher compression ratio of the diesel engine means it has a high expansion ratio – the difference between the compressed space and the space opened up when the piston reaches the bottom of its travel. That equates to higher efficiency.

Diesel engines are also unthrottled. Most petrol engines throttle the amount of air going into the engine because the air-to-fuel ratio needs to stay at the optimum point of 14.7:1, so the quantity of fuel and air entering the engine are both regulated. A diesel engine runs very lean (much more air) and can draw in as much air as it wants, controlling the power only by injecting more or less fuel. The petrol engine is attempting to suck in the same amount of air at low throttle openings but can't, causing 'pumping losses'. It's like sucking through a squashed straw: the engine can't win but it uses energy trying. The unthrottled diesel engine doesn't have that problem, which also increases efficiency.

On the thorny and controversial question of emissions, the diesel generates less CO_2 because it's more efficient and burns less fuel. It does create more oxides of nitrogen (NOx) inside the combustion chamber but that has nothing to do with the composition of diesel fuel. NOx is formed in any high-temperature combustion process because nitrogen in the air combines with oxygen (it oxidises). Because diesel engine combustion is hot and runs lean, it makes more NOx. This is cleaned up by exhaust after-treatment, such as SCR (selective catalyst reduction), and the latest diesels produce extremely low amounts of NOx. The diesel may have had a bad press over the past few years, but lower fuel consumption will make it a tough act to follow between now and whenever combustion engines finally bite the dust.

VW'S TWO-FOR-ONE SCR DEAL

Conventional SCR catalysts for ridding the exhaust of NOx are normally close coupled near the engine to work quickly after start-up. The trade-off is the exhaust is about 500deg C at that point but SCR is most efficient at 220-350deg C. VW's twin-dosing set-up has another SCR catalyst behind the engine where exhaust is 100deg C cooler, giving a claimed 80% improvement over conventional, single-dose systems.

Steve Cropley

MY STARS OF 2019

On our side of the car game, yours and mine, difficult times are a bonus. Why? Because the main remedy used by the people who make our cars – the bosses, engineers and designers – to combat their problems is to keep improving products and increasing their attraction to us, the potential owners.

At present, the automotive industry is beset by many problems: a need to electrify, an industry-wide squeeze on margins, a need to adapt to punitive legislation, a consequent need for wholesale re-engineering – and the overarching challenge of staying profitable so all this will be affordable.

For those of us in the words racket, it all adds up to news. There are many new cars and many new ways to drive and own them. From that point of view, 2019 has been a year of non-stop interest and excitement. Here are a few of my own stars...

ANDY PALMER

It's been a tough year for Aston Martin, but CEO Andy Palmer has braved the opprobrium of the financial analysts, steering the company towards what everyone hopes will be the safe harbour of a good launch for the £150,000 DBX soft-roader and burgeoning of customer demand. The product looks well judged, and Palmer is ensuring it gets every chance.

LARRY HOLT

The hirsute Canadian-Brit who runs the car creation side of the giant Multimatic components supply group has kept right on developing the Ford GT he first masterminded, then led to Le Mans success. More recently, he has set about establishing his beloved Ford Mustang as a very successful race car around the world. Bet on more success in 2020.

THOMAS INGENLATH

It's far from clear how Ingenlath manages his two demanding jobs – steering the new all-electric Volvo associate, Polestar, while continuing to guide the venerable Swedish parent company's design – but things certainly seem to be working. The Polestar 1 has hit the market amid plaudits, and Volvo design continues to be much admired.

GERRY McGOVERN

The famously bluff Land Rover design boss reached a career watershed by launching a new Defender that received a tumultuous reception and did much to restore pride to an embattled JLR, which is just emerging from the financial wars. Finding the right look and spec for such an iconic Landie was deemed impossible by some. McGovern pulled it off.

LAWRENCE TOMLINSON

The tireless Ginetta boss this year launched his own supercar, the Akula, and took it to the Geneva motor show where it shocked people with its eye-grabbing shape and impressive specification. Tomlinson, who already backs the country's most successful sports car racing codes, will amaze us further in 2020.

ALAN GOW

The (mostly) good-humoured Bernie Ecclestone of tin-top racing keeps right on doing what he does: orchestrating the BTCC – the best, most action-packed and spectator-friendly racing series in the country (or is that Europe?). Refinements to sharpen the competition are regularly added, and the awesome loyalty of participants and spectators is the pay-off.

ANDREW FRANKEL

Weird, you may beckon, to cite another hack as a hero. Doesn't happen much, I have to admit. But Frankel's unique mixture of knowledge, authority, fair-mindedness, driving and racing skill, dependability, dedication to journalistic quality and his glorious ability to turn a phrase is a fine example to young and old. (Take it easy, Andrew, it's all true...)

MATE RIMAC

How can it be that this remarkable Croatian electric-car entrepreneur, who has been building his business for 10 years and has already attracted serious investment from majors like Porsche, is only 31? It's true, though. The good news for us is that the extremely personable Rimac "likes working with Brits", and has his eye on a local R&D centre.

IAN CALLUM

The recent arrival of a svelte new F-Type sports car shows how well stocked the recently retired Jaguar design boss has left his old company with enticing products. He's already active on new design jobs (cars and car-related products) in a company bearing his name. One burning question: could Callum ever recreate his own C-X75 supercar?

PADDY HOPKIRK

The famous Mini rally man recently came our way to meet a gathering of Autocar subscribers and talk about his life in cars. His career is an extraordinary tale, especially when described by a born raconteur who's modest about it. Hopkirk's effect on UK motorsport has been profound: as recently as last year, he was running the British Racing Drivers' Club.

MINI COOPER S

Our blue five-door long-termer really changed my ideas, even though I can't abide the way those rear doors are squeezed into a natural three-door body. The driving position, the JCW seats, the zingy 2.0-litre four-pot, the taut ride and especially the steering all appeal, working perfectly with the hatchback's compactness. Great car.

MITSUBISHI L200

Never liked these. But I tried the revised, re-engined model at Silverstone, and it seemed great. Not much poke, but enough. Very decent steering and ride. Above all, it carries with it that kind of optimistic simplicity that goes with vehicles like this and moves you onto a different level of car appreciation.

KIA E-NIRO

I really like electric cars (as becomes clear below), but they need a decent range because I'm always on the move. The Kia's reliable 280 miles is perfect. The e-Niro is nice to drive, quiet, comfortable, ideally sized and has every kind of gadget at what seems a very decent price. Its looks don't stop the traffic, but its seven-year warranty is a damn sight more valuable.

ALPINE A110

In the first 200 yards I drove this car, I knew they'd designed it especially for me. And for you. It's one of those special machines that welcomes you by feeling instantly familiar and comfortable. It's quick but not explosive and, every time you stop, you look back (a habit I thought I'd given up). Best of all is the lightness: you feel it as it starts to move.

JAGUAR I-PACE

We've had this rule-breaking electric cat on our fleet for months, and nothing has bobbed up to beat it for that elusive combo of performance, refinement, beauty, comfort and desirability. The competition to grab the keys continues as if it were our first weekend with the car, as does the never-ending interest it creates wherever you go.

TESLA MODEL 3

This was a major surprise. I first drove it against a Jaguar XE (good car) and realised I could easily live with one. Especially the Long Range, which will take you 300 miles-plus. Okay, the steering and ride are 85% on an I-Pace scale, which is still great, but it's much cheaper (the saving will buy you an MX-5). The performance is amazing, and the quality seems fine.

McLAREN 720S SPIDER

For me, the ideal supercar. Far more poke than I could ever need, deployed in a way I can manage. Superb gearbox and ratio spread. Lovely steering. Comfortable cabin with good access. But what really makes it special is that the 720S inspires over long distances when you're just driving, as opposed to fulfilling some travel chore. That's the true test.

FIAT TOPOLINO

Weird choice, but I spotted this lovely pre-war 'little mouse' in the Shuttleworth Collection this summer. In the Aussie bush town where I was born, the local garage man had one – the craziest car you could own in those parts. The design was amazingly prophetic – the epitome of a 'little big car' – and I especially love that 'shield' grille. They changed it later.

CITROEN BERLINGO

How could I leave this out? Managed to smuggle the latest van-cum-people carrier home to Gloucestershire to compare it with the original Berlingo Multispace we've enjoyed for 16 years. High praise to say it stood the test. It's bigger (shame) but the ride and steering are entirely in character. And PSA's 1.2-litre turbo triple is lovely. Not selling mine, though.

LOTUS EVIJA

It was a great moment, watching long-time Lotus design boss Russell Carr unveil his madly powerful electric flagship in central London. But the truth behind it is better still: that the company's new owner, Geely, seems to be doing at Lotus what it has done at Volvo – allowing people who know what they're doing to keep doing it. What an outcome!

FINAL WORD

If you've read this far, you'll know we've had a bumper year at Autocar. We face 2020 in great condition and heart: the website's popularity is flying and the magazine – against an awful trend in the periodical business – has posted two recent modest circulation increases.

Such things only happen because loyal readers continue to support us, and we don't forget the importance of that. On behalf of everyone here – and if you count hacks, designers, developers, administrators and the blarney-merchants whose job is to attract our advertisers, there are 40 of us – I send our warm thanks for your support, and our sincere hopes that you enjoy a wonderful Christmas and New Year.

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✉ steve.cropley@haymarket.com @StvCr

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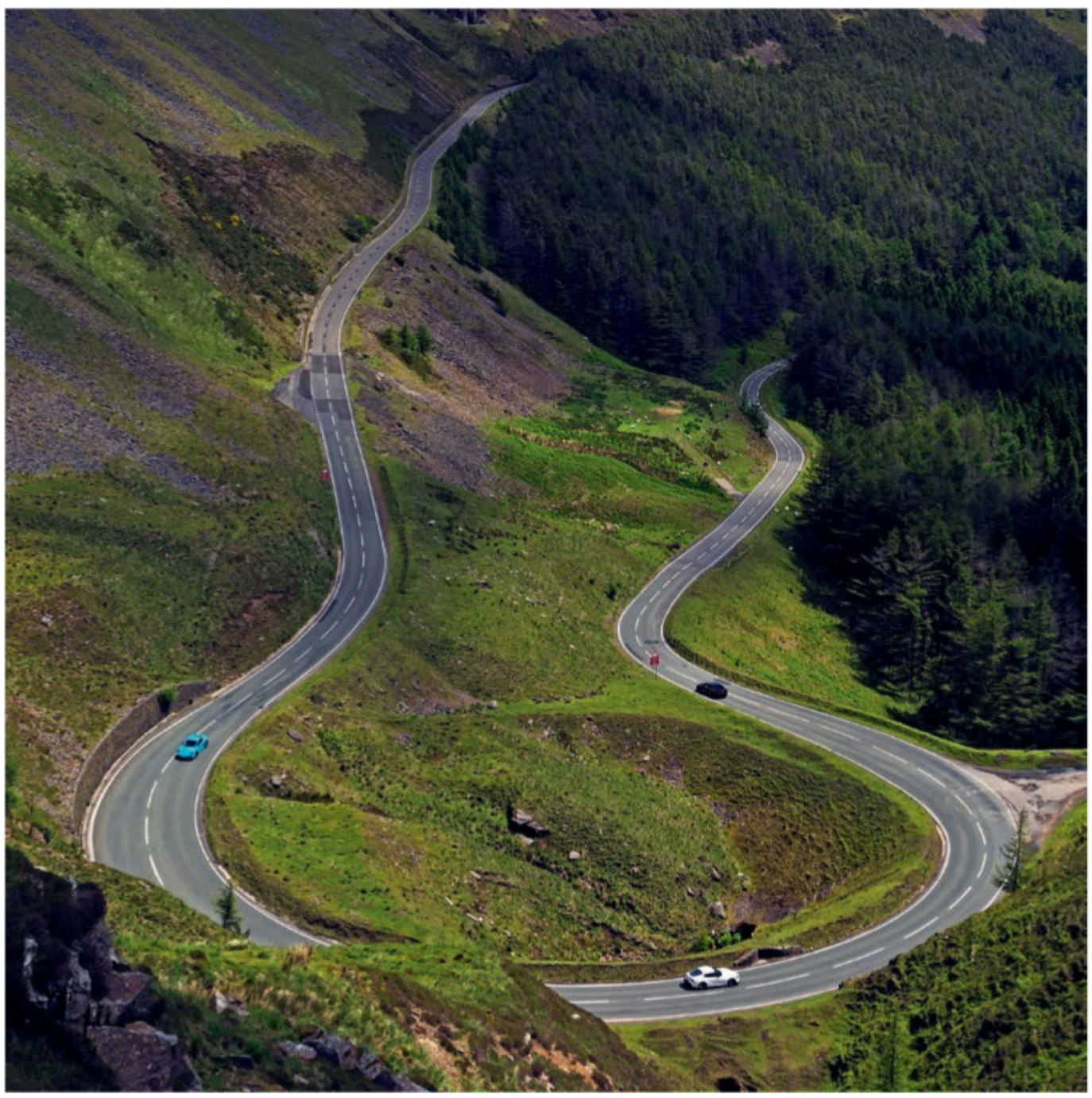

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TESTED 29.11.19, TYROL, AUSTRIA **ON SALE** NOW **PRICE** £65,000 (EST)

MERCEDES-BENZ GLE 350DE 4MATIC COUPE

Diesel-electric plug-in driveline gives the new GLE Coupé a class-leading electric range, but is there anything else about it to lure buyers in? In a word, yes. Read on...

Mercedes-Benz, by its own admission, was late in joining the SUV coupé ranks. Instead, it preferred to sit back and take a wait-and-see approach as its more progressive premium-brand rivals led the way into what has, for better or worse, become an indispensable part of any large-scale luxury car maker's line-up.

But after tasting initial sales success at the more profitable end of its line-up with the first-generation GLE Coupé, it has wasted little time in launching this new, second-generation model, which has both more resolved exterior styling and greater interior luxury than its predecessor, launched in 2015.

The new GLE Coupé is aimed directly at the likes of the Audi Q8, BMW X6 and Porsche Cayenne Coupé. Unlike the model it replaces, though, it is not merely a rebodied version of the 'regular' GLE SUV.

To help provide the coupé with a more individual appearance, Mercedes has rung the changes, giving it a 62mm-shorter wheelbase than its more upright US-produced sibling, at 2935mm, among other measures. Compared with the old GLE Coupé, though, it has grown: its length is up by 39mm to 4939mm, the width has increased by 7mm to 2010mm and its height is a scant 1mm lower than before, at 1730mm.

As with the bullish-looking exterior, the cabin has been thoroughly redesigned, in line with moves made with the GLE SUV. Key elements include a pair of 12.3in digital displays for the instruments and infotainment functions. As in other recent new Mercedes models, they are housed within a single panel atop a new multi-layered dashboard and are controlled by the German car maker's new MBUX operating system, with touchscreen, conversational speech and gesture control functions complementing small touchpad controllers within the horizontal spokes of a new →

TESTER'S NOTE
The GLE Coupé's boot is actually 25 litres bigger than that of the more upright GLE. Its loading lip is now also 59mm lower than on the previous GLE Coupé. So rakish doesn't have to mean less practical. **GK**

> You're scarcely aware of which of the two power sources is doing the driving in urban use

All GLE Coupés are four-wheel drive and this 350de plug-in hybrid mounts its electric motor within the automatic gearbox

multi-function steering wheel and a larger touchpad within the centre console.

It's an agreeable driving environment. The high seating position affords a commanding view out front and higher-grade materials throughout the cabin create a genuinely upmarket feel. One of the more notable new features is an optional large, high-quality head-up display. Active Stop and Go assist – an optional function that permits semi-autonomous driving in traffic jams – is also among a wide range of driver assistant programmes adopted by the new model.

Despite the increase in external dimensions, accommodation remains much the same as before. Front shoulder room has risen by 21mm but other measurements go largely unchanged, according to Mercedes. That said, the new GLE Coupé is eminently practical in spite of its swoopy roofline and liftback-style tailgate. It offers more than adequate space for five adults and, with a boot whose through-loading width has been expanded by 24mm, there is a slight, five-litre increase in luggage space, at 655 litres.

The basis for the new model is Mercedes' MHA platform, as used by the latest GLE SUV. It is claimed to offer an impressive 33% increase in rigidity over the structure used by the first-generation GLE Coupé, thanks in part to the adoption of cast-aluminium nodes for the front and rear suspension mountings.

The new GLE Coupé will be sold in the UK with a choice of petrol, diesel and diesel-electric plug-in hybrid drivelines. As standard, all come mated to a nine-speed torque-converter automatic gearbox and Mercedes' 4Matic four-wheel-drive system, which, in its latest form, offers fully variable apportioning of drive between the front and rear axles.

Upmarket ambience is helped by, but not limited to, the digital displays

We cover the sole petrol unit – a turbocharged 3.0-litre inline six-cylinder motor with 429bhp and 382lb ft used by the Mercedes-AMG GLE 53 4Matic Coupé – in the review opposite. The two diesel models use a turbocharged 2.9-litre inline six-cylinder engine, which develops 268bhp and 442lb ft in the GLE 350d 4Matic Coupé and 325bhp and 516lb ft in the GLE 400d 4Matic Coupé.

But it's the plug-in hybrid unit in the GLE 350de 4Matic Coupé, driven here, that represents the biggest advance. It runs a turbocharged 2.0-litre four-cylinder diesel engine in combination with a gearbox-mounted electric motor for an overall system output of 316bhp and, equalling the GLE 400d Coupé's torque output, a substantial 516lb ft. That's sufficient, Mercedes claims, for a 0-62mph time of 6.9sec and governed top speed of 130mph.

The dual power sources are terrifically well integrated in hybrid mode, to the point where you're scarcely aware of which one is doing the driving in urban use. With those deep reserves of torque, the delivery is engagingly flexible, giving the GLE 350de Coupé outstanding cruising qualities. That said, there are times when the diesel engine has to work quite hard to deliver the performance requested and it is quite vocal.

With a 31.2kWh lithium ion battery housed within the floor of

the boot, the GLE 350de Coupé delivers a class-leading WLTP electric range of between 51 and 62 miles at speeds of up to 100mph. As a result, its combined cycle fuel consumption is rated at between 217.3mpg and 256.8mpg – figures that you'll never replicate in real-world driving but endow the most economical of all the new GLE Coupé models with true tax-busting CO_2 credentials that should make it attractive to company car drivers.

The amount of electric energy regenerated under braking and coasting is very impressive. It is achieved via all four wheels, rather than just two as on earlier plug-in drivetrains offered by Mercedes. Full recharging of the battery, meanwhile, can be completed in 30 minutes at a rate of up to 60kW, making it faster to 'refill' than any rival in this respect.

Dynamically, the 2690kg GLE 350de Coupé can't match the heightened agility offered by other new GLE Coupé models. However, its roll and pitch movements are nicely contained, even over challenging alpine roads. The added weight brought on by its diesel-electric driveline and large battery also robs its standard steel suspension of some of its otherwise fine compliance. However, with Mercedes' E-Active Airmatic chassis technology as an option, it still manages to deliver the cosseting qualities that suit the upmarket ambience created by its cabin.

The GLE 350de 4Matic Coupé will not be to everyone's taste, particularly those without easy access to a charging point. But if you're looking for genuine zero-emission capability over extended distances, truly luxurious qualities and an ability to stick out from the SUV crowd, it might just be for you.

GREG KABLE
@gregkable

MERCEDES-BENZ GLE 350DE 4MATIC COUPE

Tax-busting, distinctive-looking SUV delivers feel-good luxury travel with an impressive electric-only range

★★★★☆

Price	£65,000 (est)
Engine	4 cyls, 1950cc, turbocharged, petrol, plus synchronous electric motor
Power	191bhp at 3800rpm (diesel), 134bhp (electric), 316bhp (combined)
Torque	295lb ft at 1600rpm (diesel), 324lb ft (electric), 516lb ft (combined)
Gearbox	9-spd automatic
Kerb weight	2690kg
Top speed	130mph (governed)
0-62mph	6.9sec
Economy	217.3-256.8mpg
CO_2	30-34g/km
RIVALS	Audi Q8, BMW X6, Porsche Cayenne Coupé

TESTED 29.11.19, TYROL, AUSTRIA **ON SALE** SPRING 2020

MERCEDES-AMG GLE 53 COUPE

AMG-honed dynamics and 429bhp punch match sporty looks

Mercedes-Benz's AMG performance car division is not holding back in launching a go-faster version of the second-generation GLE Coupé. From the outset of UK sales next spring, this new sporting GLE 53 Coupé model will sit alongside the standard 350d and 400d diesels and diesel-electric 350de in a four-strong initial line-up.

The successor to the earlier GLE 43 Coupé has been conceived to rival the likes of the Audi SQ8, BMW X6 M50i and Porsche Cayenne S Coupé, providing a stepping stone to the range-topping GLE 63 Coupé that was revealed at the recent Los Angeles motor show.

The GLE 53 is the latest model to receive AMG's mild-hybrid drivetrain, which was initially launched in the CLS 53 back in 2018. It employs a turbocharged 3.0-litre inline six-cylinder petrol engine that develops 429bhp and 384lb ft, in combination with an integrated starter motor that's capable of providing an additional 21bhp and 184lb ft for brief periods of loaded acceleration.

By comparison, the older turbocharged 3.0-litre V6 used by the GLE 43 delivered 362bhp and 384lb ft through a less highly developed seven-speed transmission and 4Matic four-wheel-drive system.

Predictably, performance is defined by the strong reserves of torque delivered by both the combustion engine and the electric motor. Despite tipping the scales at 2250kg, the GLE 53 Coupé offers robust step-off and brawny in-gear acceleration, as evidenced by its official 0-62mph time of 5.3sec.

Equally as impressive as its sheer performance is its effortless cruising ability. The flexible nature of the drivetrain and the terrifically smooth operation of its transmission endow the GLE 53 Coupé with outstanding long-distance qualities. With substantial 275/50-profile tyres as standard front and rear, it does suffer from some annoying high-speed tyre roar on less than smooth road surfaces, but for the most part, refinement is exceptional for a large SUV with such a sporting brief.

It's the heightened dynamic ability that really makes its mark, though. There's greater engagement in the steering and handling than you'll experience in standard GLE Coupé models. When hustled along challenging roads, the GLE 53 Coupé displays the sort of agility and direction-change adroitness that can challenge the best of its high-riding rivals. With strong grip and its new four-wheel-drive system constantly altering the amount of drive to the front and rear wheels, it can be made to carry quite high speeds through corners without any tyre-squealing drama. Traction in all conditions is exceptional.

The AMG Ride Control suspension provides outstanding body control and a noticeable improvement in ride over the older GLE 43. Indeed, there's a far more settled feel to its ride, especially at urban speeds, where there is a new-found level of compliance.

GREG KABLE
@gregkable

MERCEDES-AMG GLE 53 COUPE

Impressive performance and rolling refinement but expensive. Lacks the practicality of the upright GLE 53, too

★★★★☆

Price	£75,000 (est)
Engine	6 cyls, 2995cc, tubocharged, petrol
Power	429bhp at 6100rpm
Torque	384lb ft at 1800-5800rpm
Gearbox	9-spd automatic
Kerb weight	2250kg
0-62mph	5.3sec
Top speed	155mph (governed)
Economy	30.4mpg
CO_2, tax band	212g/km, 37%
RIVALS	Audi SQ8, BMW X6 M50i, Porsche Cayenne S Coupé

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TESTER'S NOTE
The Golf's adaptive cruise control now uses GPS and camera feeds to slow down for corners or junctions and adjust according to the speed limit. **RL**

TESTED 4.12.19, PORTO, PORTUGAL **ON SALE** SPRING

VOLKSWAGEN GOLF 2.0 TDI

Latest Mk8 Golf introduces a new era for diesel power, Volkswagen hopes

Not so long ago, if you wanted an everyday car with good performance, excellent fuel economy and even better ergonomics, you bought a turbo diesel Volkswagen Golf. British roads overflowed with these cars, whose dullness, it seemed at the time, was the reasonable price to pay for vice-free motoring in many other respects. But we all know what happened next and lately the pick of the Golf's engine line-up has been the 1.5-litre TSI – a smooth-spinning, downsized petrol that, for the eighth-generation car, has also been fitted with 48V mild-hybrid tech.

It's unlikely any diesel-propelled Golf will ever again enjoy such popularity, but the Mk8 version is nevertheless here and, according to VW's engineers, TDI diesel power is now even cleaner than the equivalent petrol. That's because a new 'twin-dosing' system hits exhaust gases with AdBlue upstream of not one but two selective catalytic reduction (SCR) sites that together act on the gases over a broad temperature range to cut oxides of nitrogen concentrations by 80% compared with the old model.

It all sounds quite heavy duty, but it also makes the latest diesel Golf exceptionally clean. Of course, this car also needs to bring owners the more tangible benefit of sipping fuel in religiously frugal fashion. VW hasn't released official numbers yet, but on the basis that fuel consumption is said to be 17% better than the outgoing TDI engine's, combined economy should better 60mpg by WLTP standards. On paper, it is an almost unbelievable improvement, but then this EA288 Evo engine is nearly entirely new, with much lower mechanical losses than the old unit.

Its displacement is 2.0 litres, with the old 1.6-litre now history in terms of hardware and concept. However, there are two power outputs for this 2.0-litre four-cylinder to cater for both those who want nothing more than a steady tool car and those who would like some bite to match the Mk8's visual bark. You can then have either a seven-speed dual-clutch or six-speed manual transmission and it's the dual-clutch Autocar has driven, mated to the more powerful 148bhp engine (versus 109bhp), which generates its peak torque output of 266lb ft from only 1750rpm.

Out on the road, the easy-going drivability of bygone TDI Golfs remains. Overly conservative gearshift mapping has become a problem in petrol cars programmed to game economy tests, but diesel torque smothers the issue here and the shifts themselves are, for the most part, impressively smooth.

And yet its note is coarser than expected under load. It's not a deal breaker, just a little out of step with an interior ambience and general demeanour that otherwise reek of polish and maturity. We'd expect a touch more class in the engine bay and the lack of aural sophistication is especially noticeable when pulling away from junctions or out of third-gear corners, when the TDI unit growls too enthusiastically.

Which isn't to say that this TDI engine is unrefined in general. At motorways speeds, when seventh gear will drop crankshaft speeds to just 1500rpm, it's so discreet as to be undetectable and even the small amount of wind noise generated by the shapely door mirrors is exposed.

There is also the balloon of easily accessible torque. It's still the defining characteristic of the car and will make this TDI usefully more responsive than the TSI or even the hybrid eTSI when loaded with passengers or luggage. In the lower gears, the power delivery can seem hesitant before dramatically piling on propulsive force at around 2000rpm, but once into third gear, it will spin out in impressively linear fashion for a diesel workhorse, even if there's no point in ever venturing beyond 4000rpm.

Without knowing the exact price of the car or how far it will go on a tank of fuel, we can't yet offer any definitive verdict on the latest TDI Golfs. But as with the Mk7, the Mk8 Golf is probably the car with the greatest all-round appeal in this class and an economical diesel engine so refined at a cruise will do nothing to stunt its appeal as an everyday car for high-mileage drivers, even if the TSI is the more engaging motor.

RICHARD LANE
@_rlane_

Mature, polished character of the cabin is matched by the smooth, quiet cruising ability of this diesel

VOLKSWAGEN GOLF 2.0 TDI

New engine technology aims to restore credibility for TDI power and the Mk8 Golf benefits handsomely

★★★★☆

Price	£28,500 (est)
Engine	4 cyls, 1968cc, turbocharged, diesel
Power	148bhp at 3500-4000rpm
Torque	266lb ft at 1750-3000rpm
Gearbox	7-spd dual-clutch automatic
Kerb weight	1400kg (est)
Top speed	139mph
0-62mph	8.8sec
Economy	WLTP figures tbc
CO_2, tax band	WLTP figures tbc
RIVALS	BMW 118d, Mercedes-Benz A200d

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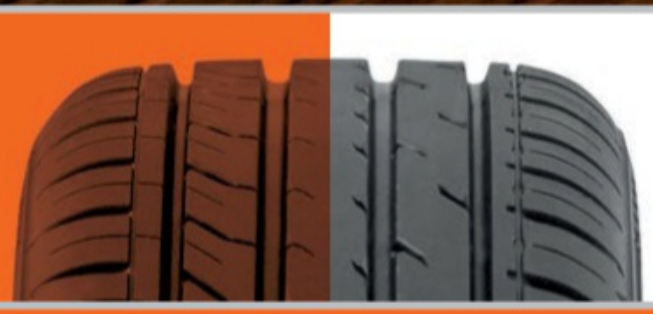

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AUDI RS Q3 SPORTBACK

Audi's first compact SUV coupé gets the full-blown RS treatment

The latest addition to Audi Sport's growing stable of RS models is part of a dual-pronged attack on the market for small performance SUVs. While the RS Q3 should appease those wanting a little extra head room for rear passengers, the Sportback earns extra style points with its sloping rear end and 45mm-lower roofline.

Looks aside, the two are mechanically identical, with the same firecracker turbo five-pot as the first-generation RS Q3. Power and torque have been boosted to a healthy 395bhp and 354lb ft, enough to hit 62mph from a standing start in 4.5sec with help from quattro permanent all-wheel drive.

It makes for the kind of explosively potent performance that we expect of any car with an RS badge, with power delivery more nuanced than the single large turbocharger would suggest. The engine responds quickly at the lower end of the rev range and confidently on to a 7000rpm redline, although the indecisive gearbox doesn't gel well with the amount of power on tap. It can take a little too long to drop a cog when prompted, and although things tighten up in Sport mode, it's best to take charge yourself using the wheel-mounted shift paddles.

Handling is assured and always predictable, allowing for confident point-to-point progress, if lacking in true driver engagement. The progressive steering rack doesn't give much sense of what the front tyres are doing through corners, and although the stiff suspension keeps body roll in check, it's only ever truly relaxed on the smoothest of roads. With the optional adaptive dampers set to Dynamic, the cabin jostles on even slightly rough surfaces.

A tech-laden interior puts the Sportback on a par with the class best, with a fully digital instrument cluster and 10.1in infotainment display equipped with the same software as Audi's more premium models. You don't have to look far to spot cheaper plastics, though.

If looks and straight-line speed are your main deciders in choosing a fast compact SUV, the Sportback makes more of a statement than the vanilla RS Q3 and delivers performance on a par with that of more expensive rivals. Still, those seeking an entertaining steer as well as rapid pace may be better served elsewhere.

TOM MORGAN
@tommorgan3

You'll not want for technology interest in the RS Q3 Sportback

AUDI RS Q3 SPORTBACK SPORT EDITION

It earns its RS badge with rapid pace and confidence-inspiring handling but rivals offer more interior refinement

★★★★☆

Price	£57,950
Engine	5 cyls, 2480cc, turbocharged, petrol
Power	395bhp at 5850-7000rpm
Torque	354lb ft at 1950-5850rpm
Gearbox	7-spd dual-clutch automatic
Kerb weight	1700kg
0-62mph	4.5sec
Top speed	155mph (governed)
Economy	27.7mpg
CO_2, tax band	204g/km, 37%
RIVALS	BMW X2 M35i, Mercedes-AMG GLC 43 Coupé, Porsche Macan

FORD SHELBY MUSTANG GT500

Price from $73,995 (£56,735) **On sale** Not in UK
What's new The most powerful Ford in history: 749bhp from a supercharged 5.2-litre V8

THIS CAR IS proof that petrolheads still run Ford, even as they put a Mustang badge on an electric SUV.

The immense power runs to the rear wheels through a seven-speed dual-clutch transmission. No manual is available, that being reserved for the 519bhp GT350 and GT350 R. It allows Ford to claim a 3.3sec 0-60mph run, an absolutely eye-popping time for a front-engine rear-drive car.

To drive, it is better than a blunt weapon but far from a precision instrument. The good news is that if that's what you want, a GT350 will provide it for a lot less money. The bad news is that if you want either, you'll need to move to the US because the cost of homologation in the UK would far outstrip any profits that might otherwise result. **AF**

★★★★☆

PORSCHE TAYCAN 4S

Price £83,367 **On sale** Now
What's new? A new entry-level Taycan and one that is at least as good as the Turbo version

IF YOU'RE INTERESTED in getting a Porsche Taycan, this is the one you should buy. And do so with the optional Performance Plus battery, at £4613. That buys you a 93.4kWh battery compared with a 79.2kWh unit, for additional range, faster charging and better performance.

This entry-level Taycan will still hit 62mph in 4.0sec but, to me, the chassis is its greatest achievement. When we drove the Turbo S, we marvelled at how well Porsche had been able to manage such enormous mass and the lighter 4S is better still. No four-door car of this weight blends handling and ride so skilfully. It is engaging and rewarding to drive, and compared with most electric cars right now, that is a triumph. **AF**

★★★★★

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THE BECKFORD ARMS
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Let's talk turkey

It's the road testers' Christmas lunch. Time to talk candidly about 2019's top cars. **Steve Cropley** is at the head of the table

PHOTOGRAPHY MAX EDLESTON

Just make sure you're at the Beckford Arms by 9am, said Saunders, our organiser, not sounding excessively Christmassy. Truth be told, 9am did seem a touch early for something billed as a convivial pub lunch where a group of road-testing mates would embrace the Christmas spirit, especially as said Georgian public house is a good two hours from the office in wildest Wiltshire.

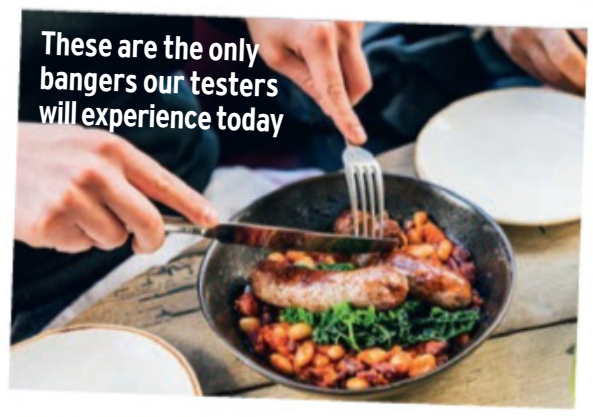
Of course, we knew the real reason for the early start. The one thing about gatherings of drivers and cars – from which words and photographs will be extracted – is that they begin in an early, time-eating frenzy of car arranging and cleaning, followed by an extended bout of camera action and then some more arranging and shooting after that, just to be sure.

Then will come action shots, during which (especially at this time of the year) the cars get covered with road gunge in their first 100 yards, so you'll have to clean them again. Sure, there will be a nice lunch in the middle of it all, but the surrounding activities will ensure the day doesn't end until daylight runs out around 4.30pm – and I've seen many a photographer (to a person, they're obsessives) extend winter shoots by illuminating one car with the headlights of another.

Not that I want to sound less than profoundly enthusiastic about our Christmas junket: this was, after all, a gathering of the finest road-testing talent this side of the equator; a team of enthusiasts driving and gassing as usual about their favourite cars and little else. For a whole day.

Besides road test editor Matt Saunders, who chose to appear in a vast red and black Jeep Wrangler Rubicon, there was Matt Prior in a svelte 600bhp Polestar 1 plug-in hybrid coupé, Andrew Frankel in a magisterial Porsche 911 and James Disdale in a BMW 320d Touring, his version of 2019's perfect family car. Simon Davis's choice was a Toyota Supra, almost scary in its extreme yellowness, and Ricky Lane's McLaren 600LT was the major eye-grabber of the group despite a calm grey-green paint job. Finally, there was me in a white Tesla Model 3 Long Range, a car that has profoundly surprised and impressed me during the year. I looked forward to justifying my choice to the blokes.

This event has become an Autocar Christmas fixture: we each choose a recently launched car that we especially like, ideally to illustrate a personal preference in cars per se, and we take it to a photogenic location, with lunch attached. We drive, eat, talk, snap and finally head homeward, realising as the year ends how greatly we love this job and want to keep doing it next year. Also just how different from one another a clutch of great cars always are. "There are no really bad cars any more" goes the pub litany, and that's just about true. But this year-end exercise always shows how diversified cars continue to be and how healthy that is for buyers, drivers and the industry that makes them.


These are the only bangers our testers will experience today

Order, order. "Prior, you paying?" Prior forces a thumbs up

Last year, we chose a far-flung location atop coastal cliffs in Devon, not far from the northern edge of Exmoor. This year's destination, the Beckford Arms near Tisbury, is a pub in which I've dined a dozen times with friends who live nearby, never failing to have a good time. When we approached them with our Christmas plans, the proprietors were friendly and obliging, giving us the run of a large apron in front of their imposing building. (There was a large car park at the side for patrons whose routine was likely to be disrupted by our seven-car set-up.) I already knew the cuisine was great and the building had a beautiful bay window enveloping a large luncheon

LOVE THY NEIGHBOUR

Photographer Max Edleston spent a fair bit of the day on top of this ladder, or running up and down it, to shoot cars and people in various set-ups. He'd scoped out the location a couple of days earlier and befriended the neighbours so as to position his ladder in their front garden. The results (we think) speak for themselves.

How's it going Edleston? Up and down, up and down

'Tis the season to be jolly, fa la la la la la la la la

table through which – later – photographer Max Edleston would be able to frame food, people and cars in one image.

If all that wasn't enough, the Beckford Arms stands at the top of a picturesque avenue running through the beautiful Fonthill estate, flanked at this time of the year by the exotic colours of late autumn trees in echelon. The pub is at one end and a magnificent stone arch stands a mile away at the other. This was our almost-private drive for the day...

Saunders was late, protesting about the traffic as is traditional for people who don't get up on time. We had the other six cars in their camera positions by the time he arrived around 10, so no time lost. It was the sunniest, bluest, crispest, most perfect day (after a week of unending dankness) so Max was practically in orbit. That's another thing about photographers: when the weather's decent, they get excited and start giggling and running about with the excitement of it all. While Max ran, we talked cars... →

Wrangler and 600LT prove that quality comes in many guises

POLESTAR 1	
Price	£139,990
Engine	4 cyls, 1969cc, turbocharged, supercharged, petrol, plus three electric motors
Power	601bhp at 6000rpm (combined)
Torque	738lb ft (combined)
Gearbox	8-spd automatic
Kerb weight	2350kg
Top speed	155mph (governed)
0-62mph	4.2sec
Economy	403.5mpg
CO_2, tax band	15g/km, 16%

> “I love the way this car addresses the world we’re moving into, not the one we’re leaving behind”
>
> **MATT PRIOR**
> POLESTAR 1

Now’s not the time to fiddle with damper settings, Saunders

POLESTAR 1
MATT PRIOR

Our silver-tongued editor-at-large showed up in the coupé flagship for an all-new Swedish-Chinese electric marque, despite the fact that all Polestar 1s were supposed to be in Italy doing their stuff on the European launch. At the outset of our talk, he quoted from his first drive story a few months ago: he has been charmed by the car but also called it “nerdy, weird and expensive”.

A vital point of enjoyment for Prior is that the Polestar 1’s ultra-rigid carbonfibre structure has a passive suspension beneath, featuring highly sophisticated 22-stage Ohlins dampers. “I just like it,” said Prior. “They could have given it air springs and adaptive dampers like everything else in the price range, but instead they thought: let’s tune this to be sporty and have a bit of fun.”

The fact that it’s got 600bhp plus a sophisticated PHEV powertrain featuring advanced torque vectoring – most noticeable when you’re playing in high-speed corners – means it never feels like a Volvo, something that might have been a concern.

“I love the bodystyling,” said Prior. “It’s impressive, but it’s also the kind of car you can take anywhere. The Volvo-inspired cabin shows it can be comfortably stretched to £140,000 and I especially like the wit of the transparent panel over the electrical gubbins in the boot that makes it look like a flux capacitor. It’s great and, above all, it’s cool.”

PORSCHE 911
ANDREW FRANKEL

We should have known Frankel would appear in a Porsche 911. He's a lifelong devotee, a former owner, and has punted more rear-engined Porkers than most of us have driven Vauxhalls. What's more, he'd freshly witnessed the stellar performance of this very car at our recent Britain's Best Driver's Car contest, based on the Anglesey circuit.

But there's far more to his regard for this car than that. Frankel sees a palpable gap between the capabilities of this 992-series 911 and last year's 991: "It's a quiet car, a comfortable car, and everything works so well now. It has a total, leave it outside, get it dirty, use it and abuse it capability, but when you need it to perform, it's absolutely magical. I just don't buy what people say about the latest 911 being too big. Sure, it's bigger than older 911s, but if you relate it to rivals like the Audi R8, it feels compact.

"Originally, I felt slightly affronted by the idea of a turbo for every 911, but the way this car's engine uses the torque to challenge the chassis, and makes good sense of the gear ratios, means it's a better car than any predecessor."

> "It's the bandwidth that astonishes. It's lovely to drive slowly, but it also does other things 911s do, even better"

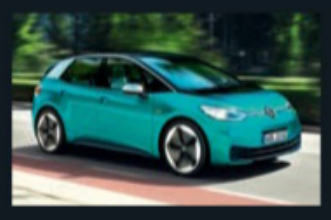
Frankel preaches to the converted on his 911

Today, German cars outnumber all but the American ones

PORSCHE 911 CARRERA S

Price	£93,110
Engine	6 cyls, 2981cc, twin-turbocharged, petrol
Power	444bhp at 6500rpm
Torque	391lb ft at 2300rpm
Gearbox	7-spd dual-clutch auto
Kerb weight	1590kg
0-62mph	3.7sec
Top speed	191mph
Economy	27.2-28.5mpg
CO_2, tax band	205g/km, 37%

MY MOST EAGERLY AWAITED CAR IN 2020



VOLKSWAGEN ID 3
A rear-engined VW designed to mobilise the masses as efficiently as possible? We've been here before. But there's every reason to believe this innovative electric hatch could prove just as significant as the Beetle turned out to be. **JD**

AUDI RS6 AVANT
Early reports suggest this new RS6 has been injected with some of the much-needed panache and engagement recent Audi Sport models have lacked. That it also looks the bee's knees, and retains a V8 engine, is encouraging, too. **SD**

PORSCHE TAYCAN
The electric car is set to take a huge leap next year. I haven't driven a Taycan, which should be a pretty memorable occasion – but I wonder if introducing the VW ID 3 to its rivals might be even more important. Watch this space. **MS**

BMW M2 CS
Come on, this is obvious. The M2 was very good and the M2 Competition sensational, with its muscle-car character and dynamic precision. The lighter CS should be better still, and you'll even be able to have a manual 'box. Heaven. **RL**

FIAT 500
Loads to anticipate in 2020 from a professional and technical standpoint. And where the city car goes next (if anywhere) will be fascinating. And I love small, light, cheap cars. So sign me as excited for the next Fiat 500. **MP**

LAND ROVER DEFENDER
Phew! There are so many. But the serious choice has to be between Aston DBX and Land Rover Defender, two cars whose fortunes are crucial to their makers. Do I really have to choose? Oh, all right, Defender... **SC**

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JEEP WRANGLER 2.2 MJET II RUBICON

Price	£48,420
Engine	4 cyls, 2143cc, turbocharged, diesel
Power	197bhp at 3500rpm
Torque	332lb ft at 2000rpm
Gearbox	8-spd automatic
Kerb weight	2122kg
0-62mph	9.6sec
Top speed	112mph
Economy	36.2mpg
CO_2, tax band	206g/km, 37%

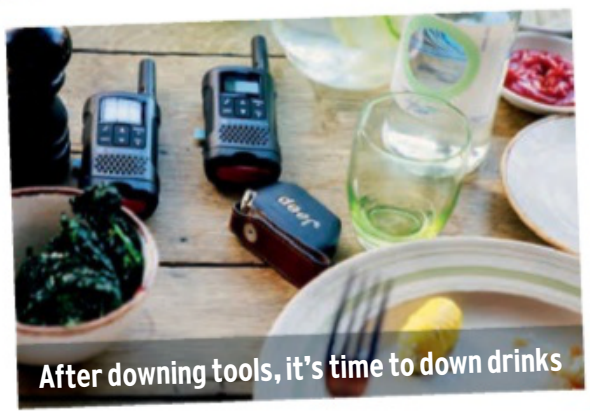
> “It’s a car that makes you want to change what you’d planned for the weekend”
>
> **MATT SAUNDERS**
> JEEP WRANGLER

Steady, Saunders, or you’ll spend all afternoon cleaning it

JEEP WRANGLER
MATT SAUNDERS

For Saunders, the new Wrangler’s story is mostly about toughness and versatility – he loves cars like that – but it’s also about Jeep’s classy new iteration of a classic model: “The previous edition didn’t move the dial. It didn’t look or feel special, although it did the big thing, which was to keep Wrangler traditions alive.

“This one’s much better executed. You’d never mistake what it is – it’s like the Porsche 911 in that way – but it’s clearly better designed and built.



After downing tools, it’s time to down drinks

You soon form a decent mind picture of the customer it’ll attract, someone who understands it and may have owned other Wranglers. It’s all about lifestyle: you can imagine towing a caravan to the Lakes with the kids aboard, then ditching the doors and folding the screen, sticking a barbecue in the back and heading to the water. Jeep has been consistent with this model, and now that the Land Rover Defender has moved away from having a frame chassis and ‘proper’ axles, there’s nothing like it.”

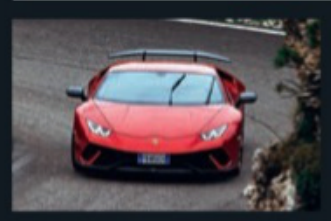
The Wrangler isn’t exactly refined, said Saunders, especially with the hardcore Rubicon’s knobbly tyres fitted. “The refinement doesn’t match regular SUV standards,” he said, “but if you have a normal family car and only this for ordinary driving now and again, it’s absolutely fine.”

TOYOTA SUPRA
SIMON DAVIS

Very few cars are quite as yellow as the new Toyota Supra that Simon Davis brought to our lunch venue, but it certainly wasn’t the paint job that encouraged him to choose it. It was something more cerebral. “It’s not that I’m a massive fan of the way the Supra drives,” he said, “although it’s pretty good. Mainly, I like what it says about Toyota and the future.

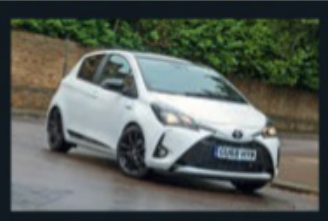
“At a time when performance car projects are being shelved – especially by companies well into hybrids and electrification – this →

THE CAR THAT DISAPPOINTED ME MOST IN 2019



LAMBORGHINI HURACAN EVO

After the sublime Performante, hopes were high for the Evo. Yet what we got was half-baked. The engine is a masterpiece but the chassis feels like the front and rear axles have been developed by different teams who never spoke to each other. **JD**



TOYOTA YARIS GR SPORT

What an entirely ill-conceived car: a 98bhp hybrid supermini with effectively the chassis from the excellent Yaris GRMN. So not only does it barely have enough power to get out of its own way, but it’s also a city car with a fiendishly sharp-edged ride. **SD**

BMW Z4

I didn’t really dislike it but was sad at its lack of ambition. To be honest, a new 3 Series is a better driver’s car than this two-seat convertible and that is absolutely not how it should be. I’ve been waiting for years for stock Z-cars to raise their games. The wait continues. **MS**

LAMBORGHINI URUS

There’s just no hiding the clear sense of loathing of the wider world around you when driving one of these. I was shocked by how fast it was, and how capable on track, but I ended up feeling all the worse about myself for how much less I cared about my impact on those around me. **AF**

MINI JOHN COOPER WORKS

Not the worst car I’ve driven but the one that makes the least of its constituent parts. It has all the right ingredients. So why is it hyperactive on turn-in and so unsettled all the time? So uncomfortable yet unfocused? A missed goal. **MP**

BMW 7 SERIES

BMW has raised the 7 Series’ game in terms of rolling refinement, cabin opulence and, most of all, the freakish way in which this luxo-barge will take apart roads better suited to hot hatches. But that grille is still unforgivable. Moreover, it’s likely a bellwether for BMW’s design future. **RL**

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← represents a heartening commitment to pure performance cars by Toyota. A rear-drive straight six is a brave model to launch today. More than that, the Supra introduces a new design language, has been deliberately configured to encourage aftermarket tuners and runs alongside a renewed GT86 programme. Toyota clearly means what it says."

Sure, the Supra looks like a BMW inside, Davis admitted, which has encouraged some critics to label the Supra a BMW in different clothes. But if this is how you sustain great sports cars, said Davis, then we enthusiasts should be happy. It gets agreed around the lunch table that this Toyota is a bit sharper to drive than its BMW Z4 relative – quite a result for the Japanese.

TOYOTA GR SUPRA

Price	£54,000
Engine	6 cyls, 2998cc, turbocharged, petrol
Power	335bhp at 5000-6500rpm
Torque	368lb ft at 1600-4500rpm
Gearbox	8-spd automatic
Kerb weight	1500kg
0-62mph	4.3sec
Top speed	155mph
Economy	34.5mpg
CO_2, tax band	170g/km, 37%

Cheapest car here is an everyday champ for true enthusiasts

BMW 320D XDRIVE TOURING
JAMES DISDALE

Soon after arrival at Beckford in a neat-looking BMW estate, Disdale began to take criticism for being "the guy who'd brought the pool car". Of our seven choices, his was the cheapest and most common. But that, he robustly argued, didn't prevent his choice from being both apt and impressive.

"It's one of those rare cars that strikes you as being all the car you'll ever need," he said, citing his own situation as a married man with a young family. "They used to call the Merc S-Class the best car in the world, but given the progress of technology and quality, and taking into account its more sensible size, I'd say that accolade now belongs to the BMW 3 Series."

The best car in the world? Disdale thinks so

Why a 320d? Because it's →

THE CAR THAT SURPRISED ME MOST IN 2019

BMW 1 SERIES
A front-drive 1 Series? Surely, BMW had blown it this time? Yet it works, and brilliantly at that. It's brimming with driver-centric entertainment, yet with the packaging that finally makes it work as a properly practical family hatchback. **JD**

ASTON MARTIN VANTAGE MANUAL
Never entirely warmed to the Vantage when I first drove it, but I'm a big fan of the manual. The meaty dog-leg 'box really helps extract an extra level of charm and character from Aston's baby sports car. **SD**

TOYOTA COROLLA TOURING SPORTS
Two surprises here: first, that Toyota's Focus rival could take such a dynamic leap forward, and second, that it could be offered with a four-pot hybrid powerplant with clear sporting appeal. **MS**

FERRARI PORTOFINO
This is a Ferrari for people only interested in the image they project, not the car they drive. Right? Wrong, it turns out. I was amazed at how improved it is over the California. Bodes well for the new Roma. **AF**

ALFAHOLICS GTA-R 290
I'd read good things about what Alfaholics did to 105-series Alfa coupés but didn't expect this to be one of the best 10 cars I've ever driven. Magical handling and an engine and transmission that are old-school involving. **MP**

TESLA MODEL 3
Sorry to be one-speed about this. I'd thought of Teslas as rather crude, cumbersome and poorly finished, but the Model 3 – even with basic single engine – has a well-packaged interior, looks great, is sized to suit UK roads and always fun. **SC**

torquey, decently quick and sensationally economical. The top-end performance of the pricier 330d that Disdale could have chosen would rarely be utilised. Why an estate? Because it's as good as a similar-sized SUV without the economy-sapping frontal area. Why an xDrive? Because it often rains in Blighty, and sometimes snows.

In the end, it was Disdale's sheer enthusiasm for this very available model that sold it to the rest of us. "We all love cars," he declared, "but mostly we can't have McLarens. In a 320d, you'll still want to take the long way home."

BMW 320d xDRIVE M SPORT TOURING

Price	£41,325
Engine	4 cyls, 1995cc, turbocharged, diesel
Power	187bhp at 4000rpm
Torque	295lb ft at 1750-2500rpm
Gearbox	8-spd automatic
Kerb weight	1640kg
0-62mph	7.4sec
Top speed	140mph
Economy	57.6mpg
CO_2, tax band	124g/km, 32%

> "It's one of those rare cars that, when you boil things down, seems to be all the car you'll ever need"
>
> **JAMES DISDALE**
> BMW 320d xDRIVE TOURING

TESLA MODEL 3
STEVE CROPLEY

On a first drive earlier this year, I was deeply impressed with the Tesla Model 3, and not just because of the usual electric car stuff – refinement and acceleration. It was a major shock to see how well the company had kicked on from its bigger, less advanced, much more expensive Models S and X to produce a car whose entry level (after £3500 of UK government aid) started at only £38,500 – not far above well-praised Japanese and Korean battery-electric vehicles with less performance and shorter ranges.

Throw in the existence of Long Range (350 miles) and Performance (0-60mph in 3.2 sec) models and you had a simple but comprehensive model line-up. My own mini comparison of a single-motor Model 3 Standard against a Jaguar XE earlier this year showed that the quality and finish of materials were now acceptable. I yearned to drive one of the twin-motor four-wheel-drive Model 3s – and this came to pass on the Beckford run. My 280-mile three-legged trip to Wiltshire from London via Coventry was easy. The Long Range proved that it will do a reliable 300 miles, even in winter.

But there was more to my appreciation of this car than dynamics. I love Tesla's screen-based info-switchgear layout. The seats are brilliant, the ride is firm but decent and there's not much intrusion of road noise into the cabin, given the near silence of the powertrain. Six months ago, I'd have been profoundly surprised. Not now.

Cropley quizzes Lane on Model 3 and 600LT

TESLA MODEL 3 LONG RANGE

Price	£47,000 (after gov't grant)
Engine	Two synchronous electric motors (one front, one rear)
Power	360bhp (est)
Torque	390lb ft (est)
Gearbox	Single speed, direct drive
Kerb weight	1850kg
Top speed	145mph
0-62mph	4.4sec
Range	349 miles
CO_2, tax band	0g/km, 16%

Model 3 passes the screen test – and many others, too

> The 600LT Spider is one McLaren that has learned how to sing at high revs, although still not quite as the Italians do

RICHARD LANE
McLAREN 600LT SPIDER

McLAREN 600LT SPIDER

Price	£201,500
Engine	V8, 3799cc, twin-turbocharged, petrol
Power	592bhp at 7500rpm
Torque	457lb ft at 5500-6500rpm
Gearbox	7-spd dual-clutch automatic
Kerb weight	1404kg
Top speed	201mph
0-62mph	2.8sec
Economy	23.2mpg
CO_2, tax band	276g/km, 37%

Hear here: the 600LT Spider does it for Lane

Frankel and Disdale parked intelligently for a quick getaway

McLAREN 600LT
RICHARD LANE
Lane is solidly addicted to supercars and rates the 600LT as one of McLaren's best, especially on engine note grounds. Which is an achievement: "Ferrari and Lamborghini have had many decades of tuning exhausts – they've shown it's an art form – but the 600LT is McLaren's best yet and the Spider body, with that little roll-down rear window, lets you appreciate it best."

Engine "music", said Lane, is starting to match McLaren's other, more generally agreed areas of excellence: the driving position, visibility, steering and layout of major controls. Other somewhat crustier members of Autocar's road test fraternity were a shade sceptical of Lane's emphasis on noise, but everyone concurred the 600LT takes McLaren to a place, dynamically, above more mainstream relatives.

Our table agreed there's more 'daylight' between a 600LT and a 570S (about £40,000 cheaper) than a Ferrari 488 and a rarer, pricier Pista. This, stated Frankel – possessor, arguably, of the loudest voice – is the real argument in favour of the 600LT. If you want a wonderful noise, buy a Lamborghini Huracán, he said. That car emits a noise "so fabulous, you want it played at your funeral"! A

HIGHLIGHTS OF OUR MOTORING YEAR

Autocar's writers pick their most memorable moments from another busy 12 months of driving, admiring, talking and writing about cars

MARK TISSHAW

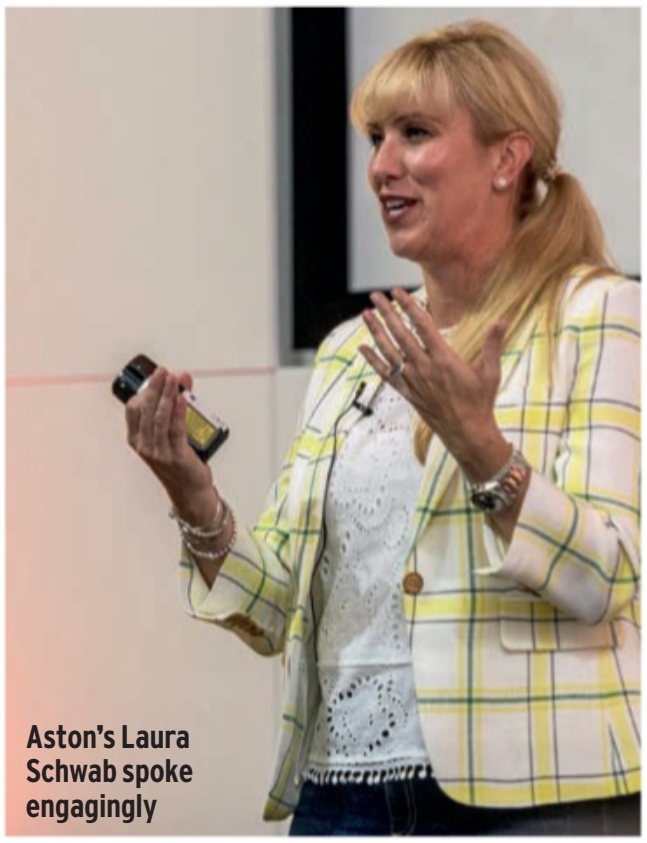
A whirlwind 48 hours in Detroit in mid-summer saw Steve Cropley and I meet every single top Ford executive to hear about their plans for the future of the Blue Oval. It was insight and access Steve shared in his comprehensive eight-page feature, which I hope you enjoyed. Yet there was one character we didn't include in the piece: Bill.

Bill, a former narcotics cop, was not only our driver but also our armed guard. "I couldn't forgive myself if anything happened to you," said Bill, surprised at why we thought it was newsworthy to even ask why he was carrying a gun. Bill kept a close eye, with sightlines at all times – presumably just in case we asked the wrong question and a Ford exec took it the wrong way...

JIM HOLDER

It was less a moment of jubilation or excitement, more one of the penny dropping and life changing. It came just days after I'd handed back my Kia e-Niro long-termer and climbed aboard the hugely capable seven-seat SUV that replaced it. And there I was, standing on a garage forecourt, dirty diesel pump in hand, £75 bill for 500 miles of fuel racking up before my eyes, when I realised that driving

Kia e-Niro: no going back to petrol or diesel for Mr Holder



Aston's Laura Schwab spoke engagingly

Trip to the US came with extra – and unexpected – security measures

anything other than an electric car that I could charge cheaply and easily and at home, while I slept, just didn't suit me any more.

STEVE CROPLEY

Years ago cars were simple and uncomplicated objects of pleasure. Then about 20 years ago, with the emergence of events like Goodwood's festivals, they changed to become passports to good times at special destinations. The snag was you needed something special: the size of the enjoyment was geared to how rare and expensive your car was.

Now the world is different – and better. Today we have the Festival of the Unexceptional (aka Concours d'Ordinaire) which celebrates mass-market cars of the 1970s and 1980s that – despite their large role in our lives – used to run until they were worn out and die unmourned. Now we realise how much they contributed to our day-to-day existence and that we miss them. This year's FotU was my first (there have been previous diary clashes) and it was my most enjoyable motoring festival in living memory. Wandering a field of Allegros and Metros, Horizons and Volvo 340s with a posse of like-minded car-nuts is something I never want to miss again. Fast-rising attendances this year show how many people feel the same.

MATT SAUNDERS

It's all too easy to get very matter-of-fact about some of the amazing cars you get access to in this job, and the amazing places that just driving them can take you to. Perhaps I have, because my highlight of 2019 was sitting in a Silverstone pit garage rather than any particular car, with three blokes who I've long wanted to properly interview – but never imagined that I'd be able to interview *together*.

Sitting down with three of the most celebrated and influential vehicle dynamicists in the car business – Porsche's Andreas Preuninger, Aston Martin's Matt Becker and Jaguar Land Rover's Mike Cross – and getting them to simply compare notes on their favourite cars, the cultures of the companies by which they're employed and their thoughts for the future of car enthusiasm was an enormous privilege. I came away from it filled with hope for what's to come – not to mention walking about ten feet tall.

MATT PRIOR

One minute we thought insurance complications would leave us unable to drive a McLaren F1 at more than 20mph, if at all. The next minute, it was sorted. (Long story. Another time.) Five hours later we handed it back having driven it long and hard enough to melt the rear numberplate.

JAMES ATTWOOD

Snapper Luc Lacey's brief was simple: 'Rally cars. Sand dunes. Blue sky. Camels.' Since we were in Morocco, watching the Future Terrain team of ex-armed forces personnel tackle the Carta Rallye in a Dacia Duster, that seemed easy. Except it was raining, the skies were leaden and the scenery featureless scrubland. Camels? Nowhere to be found.

But after hours of chasing rally cars the skies cleared, the scenery improved and then, at last, we spotted the camels. Gaunt, bedraggled camels, admittedly, but still... camels.

As the Dusters neared, Luc quickly set up his kit. But the camels weren't quite angled where the Dusters were heading. A videographer travelling with us tried to help, running at the camels, arms flailing, aiming to scare them into Luc's shot. They bolted – in the other direction. Luc eventually filed numerous amazing photos – but none with camels.

RACHEL BURGESS

An unusual one, away from the inevitable joys of driving brilliant cars. Laura Schwab, Aston Martin boss in the US, →

Puddles? In the desert? And not a camel to be seen. Almost a disaster

From left: Becker, Preuninger and Cross talk driving dynamics

We had to jump through hoops but we got to thrash this F1 properly

Festival of the Unexceptional is a highlight of the year

was the keynote speaker at Autocar's Great British Women in the Car Industry event in June. Such was her story of rising to the top, told with humour, grace and brilliance, that the audience – both men and women – were totally enraptured. Her speech, available to watch on Autocar's YouTube channel, left me buzzing for days and served as an inspiring reminder of how hard work and kindness pays off.

TOM MORGAN

Choosing Britain's best driver's car and best affordable driver's car are two of the biggest dates in the Autocar calendar. Joining the road testers to experience one for myself was pretty epic, especially as it meant borrowing the keys to some of the best hot hatchbacks on sale today – and a few that had yet to hit dealer forecourts. The ever-reliable Welsh weather tried to put a dampener on things, but that just meant timed laps went out the window in favour of sideways action in a Mazda MX-5.

JAMES RUPPERT

Not sure if you've noticed, but the Mini is 60 years old in 2019. Despite owning a few I've not been to any of the special events around the country. What I did do, though, was drive to the Autocar Awards at Silverstone in my Mini Cooper and show it off.

The editor thought it was a jolly good idea to turn up in it, and anyway they had used it for a film, which would be shown on the night. The sun was shining and the A-Series was deafening. Wonderful. I took it upon myself to slot it in at the head of the awards entrance line-up that included an Aston Martin and a McLaren. The high point was a six-year-old who was dropping his dad off at Silverstone (mum was driving, I think) and insisted on a selfie, not with a supercar but with my Mini Cooper.

MIKE DUFF

Absolutely no question on this one: driving the Continuation Aston DB4 GT Zagato at Silverstone in September. I had the Stowe circuit to myself for 40 minutes and a perfect replica of one of the most beautiful sports cars in the world to play with. Proper pinch-yourself stuff.

The DBZ is a hoot to drive, too, with lowly grip making it not only fun and predictable but also a hugely compelling challenge to push hard. It's crazy money – not least as you have to buy it with a DBS Superleggera Zagato – but if you had the cash it would be impossible not to be tempted.

LAWRENCE ALLAN

Want to feel as if Europe's economic activity is insignificant? Spend some time in a major Chinese city. I'd been to Shanghai before for its annual motor show, but good weather and less smog meant this year I could actually enjoy the cultural experience beyond merely the cars at the event. Shanghai's astonishing metropolis makes London feel pretty small and modest, and the fact that it's all happened in the past three decades or so makes it all the more astonishing.

The show itself? Bigger and better than ever. It seems silly that only a few years ago a Chinese motor show was a place where European journalists came to giggle at copycat cars. Now European brands are designing cars with China at the forefront, finding tough competition with literally hundreds of home-market start-ups with huge backing and some of the world's finest designers and engineers on board. Dismiss them at your peril.

SIMON DAVIS

I'm not the chattiest soul, so being ordered to help out with some commentary at this year's Goodwood Festival of Speed brought with it a kaleidoscope

Continuation Aston DB4 Zagato at Silverstone: Duff is in heaven

> "I had the circuit to myself and one of the most beautiful sports cars to play with"

Davis's Goodwood commentary debut ended on a high note

Bremner (on left) enjoyed a spot of dune-bashing in Peru

of butterflies. I'd be in the chair for the Friday leg of the Supercar Shootout, and from the moment I stepped into the booth, lead commentator and all-round motorsport guru Toby Moody made it clear road cars weren't exactly 'his thing'. No pressure, then. Nerves saw things get off to a bit of a stuttering, rocky start. The cars were coming thick and fast, and I felt like I barely had time to identify what I was looking at – let alone think of something interesting to say about them. But some semblance of rapport soon developed, and from that quite a heady adrenaline rush. I'd be the first to admit that I probably sounded like a complete amateur, but the sense of accomplishment was fantastic. Roll on FoS 2020.

JAMES DISDALE

Whether it's your first time or your umpteenth trip, any visit to Ferrari's Fiorano HQ is to be savoured. From Enzo's office through to the old stable garages, the place simply oozes history. Throw in the prospect of driving the new F8 Tributo, arguably the last of the pure internal-combustioned breed, and it's a nailed-on number-one hit. Of course, lapping the hallowed circuit that has played host to everyone from Lauda to Leclerc was incredible, but the real highlight came on the road. Helicoiling its way through some of the hills not far from Modena, this particular stretch of Tarmac is a popular spot for filming and photography, and once we'd used it for just that I had just enough time for one last thrash from top to bottom in the F8 before handing it back. Those intense few minutes in that howling metallic blue missile easily stand out as the best of the year.

COLIN GOODWIN

It might not sound very exotic but the most fun I've had in the line of duty this year was driving a Ford Fiesta ST all the way up to Scotland and then back down south via the Lake District, the North Yorkshire moors and north Wales.

Anything more powerful would have been frustrating (which is why driving the new McLaren GT in the south of France isn't the highlight of this year) and besides, the Fiesta ST is great fun.

Luc Lacey was along to take photos and he's good company, which is important on a three-day road trip. Glen Coe was a highlight and thanks to poor weather was deserted. As were the roads over the North Yorks moors.

We stayed in some great pubs and Lacey introduced me to the veggie full English breakfast, which up until then I had considered to be a culinary oxymoron.

The whole trip was intended to demonstrate that in order to enjoy driving in this age you have to make an effort and – if you live in the south-east of the country – be prepared to travel. It exceeded my expectations, and you can be sure I'll be doing more of the same in 2020.

RICHARD BREMNER

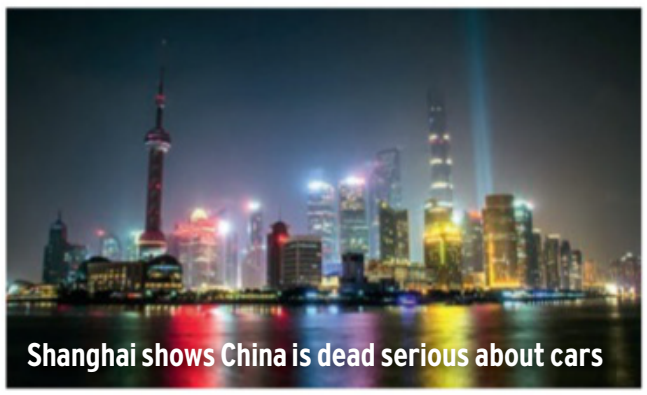
Heading towards a towering wall of sand at 70mph was an eye-widening start to the year. The sand wall was one dune among thousands in the Atacama desert near Lima in Peru. It was bearing down on us because Dakar rallyist Kuba Przygonski was driving at it in his Mini Countryman as if he were trying to bat the dune out of his way. Instead, the Mini lunged to the right, its left wheels mounting the dune's flank to fling us into a deep sand channel.

This was minute three of 20 minutes of pre-Dakar shakedown, Przygonski romping about the lunar terrain in an attempt to thrash out any last-minute troubles. But there were none, apparently, this bizarrely tall, BMW X5 diesel-propelled Countryman eventually finishing fourth. The fact of having ridden in this very car was almost as thrilling as the light violence of riding in it. A

F8 Tributo in the hills near Modena: not a lot to complain about here

What? No streaky Danish? Goodwin plots his escape

Ruppert's Mini mixed with the moderns at our awards fest



Shanghai shows China is dead serious about cars

Annual affordable driver's car contest was a cracking day out

Can you tell what it is yet?

Aston Martin takes its design secrets very seriously, as **James Attwood** discovers

If you have a Christmas tree, take a glimpse under it. There are presents there, right? They're difficult to miss, since they're probably wrapped in bright, shiny paper. Despite that, you probably think you know what some of them are – but you won't know for sure until you pull the wrapping paper off on 25 December.

There probably isn't an Aston Martin DBX under your tree (unless you have a very big tree), but you may well have spent time admiring a wrapped-up version of the car, trying to work out what it looked like underneath its mildly confusing covering. But if Sam Holgate did his job, you didn't actually know until the SUV was launched last month.

When not designing machines such as the latest Vantage, Holgate is in charge of Aston's camouflage wraps. Like most aspects of the car industry, what started as a simple goal – to disguise a new model's looks – has morphed into a publicity-hunting arms race.

Camouflage livery isn't about hiding the existence of a new car. Wrapping a vehicle in black and white swirls – or other increasingly bright patterns – self-evidently isn't going to make it hard to spot, because it will clearly draw attention to a car. So why do it?

Blame the zebra. Possibly. There's a theory their black and white stripes evolved to confuse predators, who would be dazzled by the jarring lines and left unable to work out which way said zebra was heading. The idea is disputed by some, but that hasn't stopped 'dazzle camouflage' being applied elsewhere: in the First World War, allied forces painted battleships with bright, bold stripes to bewilder German U-boat commanders.

Undisguised DBX should have been a surprise

When a car starts testing in public, designers have to accept it's going to be spotted; the camouflage wrap is about hiding the details. "It gives us breathing space," says Holgate. It's not just about ensuring the reveal remains a surprise: the intellectual property of key design features of cars will be patented, so firms need to keep those designs under wraps until that process is completed.

With a car such as the DBX, when the first prototypes left

Early DBX mules used 'off-the-shelf' Aston camo wrap

These days, grilles are too big to keep hidden

the factory, Holgate admits "it was obvious it was our first SUV on the road". Which leads us to how camouflage wrap has developed: firms know the machines will be photographed, appearing online and in the likes of Autocar. So the wrap has become "a great moving billboard to showcase us, our logo and even our partners", says Holgate. "It's all part of building anticipation."

Aston first used bespoke camouflage on the latest Vantage, with Holgate developing "crazy criss-cross stripes" that were inspired by both the firm's old logo and dazzle-patterened battleships. They also switched from black and white to the distinctive green that featured on the Vantage GTE racing car. "It was a chance to really like the road and track versions," adds Holgate.

The Vantage wrap was used for the first DBX test hack, but when the first 'proper' prototype began testing, "it felt a nice point to make a step-change in terms of the camouflage to show the development of the car".

This time Holgate took the DBX name and reimagined it in the style of an off-road tyre tread. Holgate admits there's no exact science to the design, beyond creating something with sharp edges and patterns that will distort the true shape of the car.

"The goal is to trick the eyes," says Holgate. "We create a tile pattern that we print it out on A0 vinyl sheets. When wrapped on the car, the scale and different angles cut across the feature lines, making it really hard to read the actual shape."

Holgate designs wraps using 2D images, sometimes completing a single 3D render as a proof of concept. Once the vinyl sheets are stuck on the car, partner logos and other design elements are added.

"We want to make the pattern quite complex, but it has to be easy to apply," adds Holgate. "When a car returns to the workshop we'll often swap parts, which means applying new camo each time. We don't want to make it too obvious we've changed a part."

Speed is also crucial: with test and development time limited, Aston's test team don't want to sit around waiting for complex wraps to be applied.

The volume of sculpture on an Aston Martin design makes disguising the lines particularly hard, so the firm also uses "more subtle" physical disguise elements in the form of foam blocks stuck to the car. The wrap helps to hide the placement of these elements. Lights, meanwhile, will also be covered, leaving just the minimum legal standard visible.

But there are some features that just can't be hidden, so Holgate doesn't try. "We've started highlighting the grille," he says. "It's very difficult to hide, so you just have to embrace some areas, while trying to hide other parts."

Another example is the DBX's rear wing, which deflects air down the back window, removing the need for a windscreen wiper. "We'd love to have kept that secret for the reveal, but the testers needed it working to ensure the results were right, so we couldn't disguise it," says Holgate. "When elements offer form and function, you just have to accept they're going to be seen."

Aston has updated the DBX wrap's design several times, at one stage switching it to red and adding a Welsh dragon to recognise the new St Athan plant where the model will be built. Holgate adds that since attention tends to lessen when the same livery is seen multiple times, it's seen an opportunity: "People get used to seeing the same camo, so you might be able to sneak a new bumper or something in under the radar."

The aim is that when the wrapping paper finally comes off a new car such as the DBX, the styling is still a surprise. And if Holgate has really done his job well, it won't be what you're expecting, either.

Speaking of which, that box under the tree that you think contains the keys to a new DBX? Sorry, but it's socks. A

Camouflage and brand awareness combine in Sam Holgate's designs

WILL WILLIAMS

BOHEMIAN WRAPSODIES

VOLKSWAGEN ID 3
Late test versions of VW's crucial electric hatch used a bold red and blue wrap – which was first shown with the car hidden inside a camouflaged glass box.

LAND ROVER DEFENDER
The new Defender wore traditional 'zebra' wrap, but it wasn't hard to work out what it was, not least due to the massive 'best 4x4 by far' hashtag down the side.

TOYOTA SUPRA
The Supra tested in a red, black and white camo that reflected Toyota's motorsport colours. It was also used by the company to create a wrapping paper last year.

USED CARS THAT ARE NOT JUST FOR CHRISTMAS

It's the season for giving, so why not give yourself a treat in the form of a monster-engined motor?

If you love cars, the future doesn't look like it's going to be much fun. After the Christmas turkey and crackers, it really does seem as though they want to take all our enjoyment away. It might be fairly academic, but full control of an autocar by its driver is what this magazine was founded on.

The great seasonal news is that if Father Christmas gives you something it can't be taken away. Ever. As the RSPCA is always telling us, a dog is for life, not just for Christmas. So here's a selection of oversized, inappropriate automotive hounds to keep you entertained for all eternity – and each comes with a mighty engine, big wheels and a huge personality. Merry Christmas.

VAUXHALL VXR8 6.0

2008, 100,000 MILES, £13,995

This is essentially a Monaro but with a few more doors. Underneath it all we have a rear-wheel-drive Holden V8 with a Griffin on the grille, turning it into a super-saloon with a rock-hard edge. Perfect for the family in hurry who want to make an impact.

It's not for everyone, though, and this is reflected in the market, as early VXR8s can struggle to sell – which explains some tempting prices. You might prefer the 6.2-litre engine from 2008 or the supercharged one from 2009. Not much happened after that, apart from a facelift in 2010, which marks the second major price point for what is, in effect, an M5 with an Aussie accent. Beware tired track-day cars with worn out suspension and brakes.

URAL 4320

1985, 10,500 MILES, £10,000

If the future seems bleak then you could go off-grid and live life on your own terms, a bit like Santa does at the North Pole. This 6x6 Ural would certainly be good enough for Mr Claus (guaranteed present deliveries whatever the weather), and it would be huge fun trying to fit it into your life.

They still make these magnificent oil-burning beasts in Russia, officially designated a 4320 and unofficially referred to as a 'Monster'. These are in general circulation but you will need to go to one of the specialist army surplus dealers like Tanks-Alot (see p56). Apart from starting a small war, the obvious thing to do would be a mobile home conversion. Heaven knows where you would buy spare parts from, but you could probably get a farrier to knock something up for you.

LAND ROVER DEFENDER 90 50TH ANNIVERSARY

1999, 100,000 MILES, £27,500

Yes, we all know there's a brand-new model which we can spec to an improbable six-figure sum. What it doesn't have is the old-fashioned workhorse aura or, most importantly, a petrol V8. Sure, the old ones are rubbish to drive, but no one ever bought a Series or Defender for the road manners or in-car infotainment.

So here is the last of the brutes, but you could get V8s back in the 90 and 110 days, which will still be great, especially if dented and a bit grotty. The V8 came back from time to time as aftermarket creations or official special editions. Those ones have a resaleability, which could appeal to some. Rot is not a killer, just the prelude to a costly rebuild. Bore-worn engines are telegraphed by lots of blue smoke.

BENTLEY CONTINENTAL 6.8 R

1995, 98,000 MILES, £30,000

So you've decided to treat yourself to something special. Trouble with a Bentley, and in particular a Continental, is that they're no longer that exclusive. As good as the reworked Volkswagen Group version is, it's a cliché luxury coupé which really isn't very classy. So let's go back to the first Bentley for a generation with its own unique bodywork.

If you want a two-door car with real presence, here it is. Available from 1991 to 2003, get the latest and tidiest example you can. The potential buying checklist is as big as Santa's bulging sack. If there's anything less than a full service history, strap yourself in for an expensive ride. Sorting out rotten sills and arches is the tip of any bodywork expense. Knocking suspension and noisy tappets are just a couple of sounds you don't want to hear.

FORD MUSTANG SHELBY GT500

2007, 28,000 MILES, £19,950

Never mind the 911, the best-selling real-world sports car is the Mustang. The new one is great, of course, and right-hand drive, but still a bit pricey. A 2.3 Ecoboost is now below £20k, but those who just want to pose can buy a classic 1960s hardtop with a V8 for that sort of money. What most need is that chunky, macho '60s style, eight cylinders and some modern creature comforts. I don't think the latest car looks the part, so it has to be the fifth generation from 2005. I'd go for a recent import in tidy condition, and it's heartening to find that you can also get proper Shelby versions, which makes it even more special. What a spectacular perpetual Christmas present. →

ULTIMA SPORTS GTR

2012, 11,550 MILES, £59,995

TVR TUSCAN S

2002, 22,000 MILES, £35,990

If you want a preposterous sports car with a big engine and bonkers styling and can't be bothered to wait any longer for a new TVR, then go and buy one of the old ones to keep. There are lots to choose from and prices have certainly hardened over the past few years. The original Tuscan was always a site to behold and still stops the traffic to this day. It does seem that the ones on sale with a full history and recent engine rebuilds are among the very best. Don't ever buy one without some sort of expert involvement or a reassuring warranty. Indeed, some of the engine rebuilds have five years' cover. Here's a supersonic car which is more than worth the Christmas risk.

Fancy a supercar for life? There are so many to choose from, but you'll need a six-figure budget to play the game properly. Except there are alternatives which will turn heads – and they're made in Blighty. The Ultima even has a cast-iron McLaren connection for extra cred. It could be bought as a kit or turn-key, but best to find one that was factory built.

The Ultima has a Chevy V8 and most have all the RAC-spec roll cage and six-point racing harness kit. Nevertheless, some are road legal rather than just a track-day warrior. Buy from an enthusiast owner or specialist and rest assured that the mileage will be fairly low, so the condition should be high. Strong engines, but the rose jointed suspension and cross-drilled brakes are pricey to replace.

BIG-ENGINED CARS: HOW TO BUY

HISTORY
Rather than random unsubstantiated stamps, it needs bills that relate to the vehicle.

TYRES AND BRAKES
Obviously it needs these, but if the discs are worn or rusted and the tyres are bald or worn then clearly it hasn't been looked after.

LEAKS
Look underneath for signs of escaped coolant, hydraulic fluid and oil. If in doubt, stick some cardboard underneath for 10 minutes.

JAGUAR XJR-S

1993, 78,000 MILES, £17,995

It is essential to have a V12 of some description in your all-time Christmas garage, and it's hard to overlook what staggering value Jaguars continue to be. The XJS has matured into the sort of classic gentleman's coupé the like of which will never be revived.

You have to be careful, though. They can be bought for a few grand but with all the serious structural rust and multi-cylinder complication to make your life a misery. Instead, up your budget and buy from a specialist with some warranty responsibility and bag yourself a later HE, a 1991 Series 3 or, even better, the Jaguar Sport-related XJR-S. There's also the opportunity to go topless, and some would say the convertible XJS is even more of a stunner. The premium for such louche rooflessness is just a few grand.

TRANSIENT TRANSPORT TREATS THAT'LL BE BINNED BY BOXING DAY

Not enough for you? Want something really different? Then try these alternative forms of 'motion devices...'

ELECTRIC SCOOTERS
Hip and happening at the moment in a European city near you – just not in the UK, where they're currently illegal. Seat has one that will do 20 miles.

QUADRICYCLES
Big in France where teens can drive them, but also 16-year-olds can over here with a CBT scooter test. Filmsy and pointless but motorcycle-like economy.

FLYING CARS
They were the future once and the PAL-V seems closest to reality. Meanwhile, Frank Stephenson is designing the Lilium, a vertical take-off and landing electric aeroplane.

DRONES
Obviously you'll crash your kid's toy drone, but there are human-scale ones now. Drone Taxis seem to be a thing. Being tested in Dubai and China.

ALPINA B3 3.3 CONVERTIBLE

2001, 80,000 MILES, £9995

A convertible really does make the world seem like a much more positive and wonderful place. Never mind summer, they're perfect even in winter, and what makes it even better is a rare soft-top, especially a good-value one like an Alpina B3. An Alpina is so much more than 'just a BMW'. There's a limited-edition plaque on the dash for starters, and the E46 B3 is probably one of the best-looking 3 Series anyway. An M3 might be a bit quicker but an Alpina feels more refined and special, with some nice touches. The best bit is the BMW six-pot engine with added magic, which includes lightened pistons, a revised crankshaft and friction-optimised valve gear. Switchtronic suits it, but you need a decent history and it must be immaculate to make sense as a lifelong investment.

AUDI RS6 AVANT 5.0

2008, 111,000 MILES, £15,999

Rather than a stupid SUV, which isn't necessarily slow but is certainly pointlessly bulky, take a moment to consider the shooting brake. Some may know them better as estates, but I think the really high-performance premium ones should all adopt the old moniker. Certainly putting a V10 in a practical car, rather than supercar, should be applauded and, most importantly, enjoyed. This won't be happening any more, so make the most of the 2008 to 2012 twin-turbo model, a relatively short run until the return of the 'humdrum' V8. There's plenty to look out for, not least because of the extensive plumbing involved. Coolant pipes corrode and the complicated hydraulic suspension can play up and leak of all sorts of fluids. Servicing is regular and expensive – and that's the price to pay for that ruthlessly capable load-lugging. A

TURRETS SYNDROME

A canny buy of a cheap tank has morphed into a thriving business serving thrill seekers and the film world. **John Evans** keeps the expletives to himself

PHOTOGRAPHY MAX EDLESTON

Cordial warning sign keeps intruders away

'We gotta come up with another plan. They got a tank.' They certainly have and I'm driving it across the killing fields at Tanks-Alot, a tank driving experience and training centre.

It's the Chieftain tank from the action flick Fast & Furious 6 that inspires the famous line as it burst from a container in a convoy that moments earlier had been brought to a crashing halt by a steel cable stretched across a highway.

Dramatic stuff, and now here it is in a muddy field near Brackley, Northamptonshire, being driven rather less dramatically by me, concerned for the safety of Max, Autocar's photographer, out there knee deep in mud somewhere in my blind spot.

Make that 'blind area'. Seated low at the nose of the tank beneath its 120mm gun barrel I can only see what's ahead plus a little to either side. Anything beyond this small field of vision is the responsibility of my commander, if I had one. The fact that I don't is why the aluminium ladder I used to get onto the tank has been lost for good under 70 tons of Chieftain Mk10.

No, I didn't think a Chieftain was that heavy either. In standard form they weigh 56 tons but for this one's role in the Fast & Furious film, the production crew welded on an additional 14 tons of steel at a cost rumoured to be around £240,000.

You remember Mr Bean's Mini being crushed by a tank? What you didn't see was its crew picking the car's remains out of the tracks like food from your teeth. Had they allowed the jagged bits of metal to remain, as the tracks turned they'd have ripped away the tank's side screens, bazooka plates and mudguards before setting about the tracks themselves.

Since, in Fast & Furious 6, the tank I'm driving would see quite a bit of car-crushing action, the producers calculated it would be cheaper to add some protection to it rather than stop filming every couple of flattened cars or so to patch it up.

In fact, this tank is still crushing cars – as I'm reminded when, churning through the thick mud, I see a line of around 40 flattened wrecks at the side of the field. For a second I wonder if I've taken a wrong turn through the car park...

Starting the Chieftain is a straightforward affair. You fire up the 2.0-litre diesel generator that supplies the electrical power and then flick the three switches that trigger the main fuel pumps, press the starter button and the 19-litre, opposed-piston two-stroke diesel engine roars into life.

It's an interesting motor for having two opposing pistons per cylinder, each with its own crankshaft and, depending on its location, each in charge of an outlet or inlet port. It produces 950bhp and, being a multi-fuel engine, can run on whatever juice is to hand, from Shell V-Power to vodka. Down at your feet are an accelerator pedal and a brake pedal but you'll look in vain for a clutch or

HIDDEN TREASURE

In 2017, when restoring an Iraqi tank captured by the British Army during the first Gulf war and bought for £30,000, Nick Mead and Todd Chamberlain, Tanks-Alot's chief mechanic, found five gold bars, each weighing 5kg, hidden in the fuel tank.

"We couldn't understand why, having drained it of fuel, we still couldn't lift it," says Mead. "Turns out it was the sheer weight of the gold bars, which we discovered when we levered the tank upright and noticed a hole had been hacked into its underside."

The gold was estimated to be worth around £2.5 million but Mead knew there was only one thing to do: declare his find to the police. He's still waiting for his reward.

even a gearstick. In fact, if you're a biker you'll like the Chieftain because you shift gear using a foot change like a motorcycle's. Curiously, though, you have to change gear up the 'box but it changes for you going down. If all that leaves you seriously confused, the gear you're in is displayed on a small gauge set in the instrument binnacle, just below the hatch. That's doubly useful because the Chieftain has not one but two reverse gears.

Steering is achieved by pulling and pushing on levers either side of you. Pull the right lever to brake the right track and go right, and vice versa, although when going in reverse you operate the opposing lever, which is difficult to get your head around at first. You must pull the lever firmly and deliberately, since anything less risks burning out the huge discs and pads that brake the tracks.

I'm sitting in a conventional seat but were this a standard Chieftain, I'd be lying almost on my back with the hatch closed and looking out through a periscope – a chilling prospect if this muddy Northamptonshire field were a real battle ground.

With the engine running I select first gear – and nothing happens. The sheer weight of the tank prevents it from moving. So I feed in a bit more gas and 70 tons of Chieftain Mk10 creeps smoothly forward over the field as if it were a parade ground.

With the revs building I glance →

The Tanks-Alot collection currently amounts to 180

It's not easy steering 70 tons of Chieftain tank when you can only see straight ahead; Tanks-Alot offers a car-crushing experience for would-be mechanised warlords. It's popular

down at the foot change and toe the 'box into second. The indicator needle flicks to the next number obligingly. I change up to third before trying a few changes of direction with the track brakes. The tank responds immediately and precisely.

My attempts to steer it around its own axis – called a neutral turn – are thwarted since the Chieftain requires maximum power and near-perfect conditions to contra-rotate its tracks. Still, it can out-turn most cars, which is necessary if it is to dodge enemy fire or, if I'd seen them, a set of aluminium ladders.

Despite the tank spending its days crawling around at walking speeds crushing cars, the engine has proved to be perfectly reliable. Nevertheless, owner Nick Mead's ears are permanently tuned to unfamiliar noises emanating from it. He's particularly alive to the possibility of the supercharger seals failing, resulting in the engine ingesting 35 gallons of its own oil and, as a final flourish, ejecting its 12 pistons into the crew compartment.

It's not a pleasant prospect to contemplate and, discretion being the better part of valour, I decide to return the Chieftain to its parking spot and have a play in Mead's off-road Bentley GT instead.

It's parked among an array of tanks, Abbott self-propelled guns, armoured personnel carriers and even a mighty Ural-4320 6x6 diesel, currently for sale and with a camper conversion in the back. Another of the vehicles, an Alvis Stormer purchased from Northern Ireland, still has elements of its Starstreak missile system attached to it.

Mead began collecting tanks 30 years ago when he bought a couple costing £3600 apiece. He was a butcher at the time but the fact that you could buy a barely used tank, which cost millions of pounds new, for just a few thousand intrigued him. He could only see their prices going one way and sure enough they have, as private collectors from all over the world pile in.

Evans (left) takes a lesson in tank control

The collection includes all sorts of militaria

"I've another Chieftain here that's worth £40,000 today but next year it'll be £45,000 and the year after that, £50,000," says Mead.

He has 180 tanks, mostly British, on his 100-acre site. Four of them are Chieftains, for sale at prices ranging from £18,000 to £50,000. Buying a tank is straightforward enough but Mead has to be careful who he sells to. "I can go to prison if I sell to the wrong country," he says.

It's not only collectors who value Mead's tanks. He's just back from providing some of them to the British Army for its annual demonstration of firepower. They included some of his Russian tanks and a Mitsubishi L200 pick-up he's converted into a rebel mobile rocket launcher.

"They like to have alien vehicles to target so they can practise vehicle recognition and tell friend from foe on the battlefield," he says.

What would the army make of Mead's Bentley GT W12? The 'Dakar-inspired off-roader' was created by TV's Supercar Megabuild team, who fitted it with raised and stiffened suspension, extended wheelchairs,

Tastefully modified Conti GT W12 picks up where Bentley's own configurator leaves off. It's as posh as anything inside, but the spare wheel and jerrycan do the aero no favours

> “Chieftains can out-turn most cars. It’s necessary to dodge enemy fire”

If you want your own Chieftain, prices start at £18,000

crash bars and a rear screen-mounted spare wheel, before painting it a drab shade of green. It was sold at auction in 2017 and now resides at Tanks-Alot, sporting an undignified advertising hoarding on its roof.

Bizarrely, given its outrageous exterior, its pure GT inside, right down to its magnolia hide. It fires up and settles to a hushed tickover but requires a hefty prod of the accelerator to coax it around the yard. It has lost a lot of its original tightness and warning lights blaze from the instrument binnacle but its value as a promotional tool, rather than a rival to the Bentayga, is obvious.

With my wellies heavy with mud, it’s time to stop playing soldiers. In any case, Mead has a T54 and an Alvis Saladin with deactivated 76mm gun to sell. As I leave, the air explodes with a cackle of curses from some of the 34 parrots I’ve only just noticed.

CHIEFTAIN MK10 TANK

Price	£18,000-£50,000
Engine	Rolls-Royce 13 Alpha 12-cylinder, 19-litre, opposed-piston, two-stroke diesel
Power	950bhp
Torque	1460lb ft
Gearbox	Triple differential semi-automatic
Weight	55 tons (70 tons in Fast & Furious configuration)
Top speed	30mph (road), 9mph (cross-country)
Range	310 miles
Rivals	T54, T64 and T69, M60 Patton, Porsche Leopard 1

“They’re from broken homes,” says Mead, as one of them tells me not to darken the front step again. It wants to be careful I don’t come back in my Chieftain. A

Some vehicles are for sale, but Mead could go to jail if he doesn’t properly vet buyers

JCB Fastrac

The World's Fastest Tractor has 150mph potential. Yes, really. We drive it

MODEL TESTED **FASTRAC TWO WORLD'S FASTEST TRACTOR**

Power 1016bhp • **Torque** 1770lb ft • **Weight** 4876kg • **0-60mph** 9.9sec • **30-70mph** 7.4sec • **Fuel consumption** 5mpg

PHOTOGRAPHY OLGUN KORDAL

Six months ago, this tractor did not exist. JCB had just set a new land speed record in a Fastrac tractor, an impressive 103mph. But, as you may have seen on Channel 4 recently, the JCB team and their nominated driver, Guy Martin, didn't think that was fast enough.

So JCB went away and didn't just set about upgrading the tractor that has set the July record but built an entirely one, from the ground up. So now there are two very quick JCBs.

In late October, this, the Fastrac Two, set a new world record for a modified tractor, at 135.191mph over a two-way average, with a peak speed at the end of Elvington's runway of 153.771mph. Directly from there, it was taken to London and put on static display, and from there, it was trailered to Autocar's preferred test base for this kind of thing, in Rutland. There, we became the only other people to date to drive the JCB Fastrac Two World's Fastest Tractor. This year's Christmas road test is the world's fastest tractor.

DESIGN AND ENGINEERING

★★★★★

Tractors, by definition, are not designed to travel at fast speeds. 'Traction' units are designed to haul – using lots of torque – large, heavy objects. So making a tractor go fast is anathema to the agriculture/construction business.

The regular Fastrac has an innate advantage over most tractors in that it has a separate chassis, whereas most agricultural examples do not. They often don't have rear suspension but instead suspend the cab on the drivetrain at the rear, with front suspension only. The Fastrac, meanwhile, has full suspension front and rear, which gives it better road manners than most tractors. And although the Fastrac has a slightly lower top speed than a Mercedes Unimog four-wheel-drive truck, it has a high top speed for a tractor. So as farms grow in size and fields may be miles apart, this means farmers can use a tractor rather than a truck.

You'll note that its top speed of 43mph, though, is still some way short of 155mph. So to make the WFT that fast while trying to keep it true to its tractorish roots required some extraordinary measures and it's only when you see the two machines side by side that you really see the lengths JCB's team has gone to.

The Fastrac looks fairly dynamic for a normal tractor, but with a cab high above your head and tyres that come up to your eyeballs, it's still a tractor. Next to it, the record-breaking Fastrac Two looks like a computer rendering of a concept.

For one, it's lower. The Fastrac has two deep chassis rails running from front to rear and the weight of those has been halved. It's in kind of three sections: there's a rear section around the suspension, a front section around the engine and a centre section near the cabin. The →

We like

- Strong straight-line performance
- Impressive stability
- Built so well that mammoth performance feels entirely effortless

We don't like

- Narrow operating temperature window
- Rubbish at ploughing

● Underbody aerodynamics features a largely flat floor, although the exhaust pokes through it, too. At the back, there's a wide diffuser, made from aluminium, to reduce and balance lift front to rear. Plus a parachute.

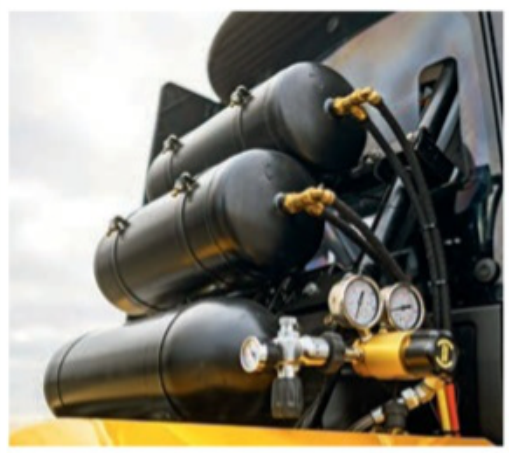
● Front bodywork directs air around the front wheels and along the edge of the engine cowling to aid cooling but also houses the cooling tank, into which 25kg of ice is placed before each record run to cool air passing through the intercooler.

● Vast water-to-air intercooler is located between a huge turbocharger and the air intake plenum. Inlet air that has been through the turbo might reach temperatures of 280deg C. After it has been through the intercooler, that can be down to 10deg C.

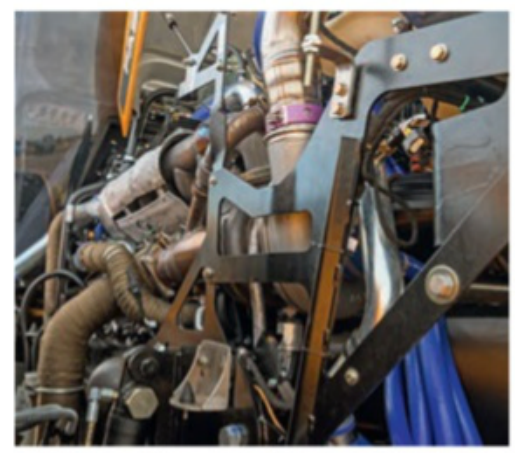
● GKN makes tractor wheels for JCB but a regular Fastrac usually uses bigger ones than this. These are machined and welded to far tighter tolerance than normal tractor wheels and the tyres need balance weights, too. Imagine the steering wheel shake otherwise.

● Of the four intake ducts, the big one is the main engine air intake and to its right one for an electric supercharger. The bottom two provide air cooling for an engine torsion damper and the exhaust respectively.

● To improve aerodynamics, the Fastrac Two sits lower and is narrower than a regular production model. Although plenty has been modified, this bonnet is a standard size and shape – just pressed from aluminium to make it lighter.



● Most tractors have a compressor but not this one. So the remote-charged scuba tank (bottom one) pushes high-energy air into the exhaust between gearshifts and keeps the turbo spinning. The top two provide air to the brakes.



● Under the bonnet, things look way more motorsport than agriculture. You can see the huge 5.0-bar turbo here, plus an exhaust partly 3D printed from Inconel to cope with near-four-figure gas temperatures leaving the engine.

● The main instrument pack is widely configurable but this is the go-to working layout: speedo, gear position, rev counter, a few temperatures and a big red flashing light if anything is going wrong.

● Multi-function controller is configured to monitor myriad on-board sensors, with the rest of the switches – clearly marked or a bright red push button – fairly self-explanatory. It starts on a rotating toggle.

● Gearlever gate like a classic Ferrari's, only beefier. Magnetic sensors at the end of each gate detect gear position because the Fastrac adjusts torque delivery in each gear. The wire is for a push-to-talk radio button.

←whole thing has been dropped, with the engine significantly lower and the front drivetrain, which makes the usual Fastrac four-wheel drive, removed. The conventional Fastrac uses a two-ratio CVT transmission, but the WFT doesn't. Instead, JCB has brought in an old-school ZF six-speed H-pattern manual truck gearbox. Behind the 'box runs a beefier propshaft (albeit one from a tractor), running through to a rear axle that features a tractor crown wheel and pinion, with a spool differential that locks the rear wheel rotation together. In some ways, if you want to go fast in a straight line, you couldn't ask for a more perfect set-up: a front-mounted, longitudinally positioned, perfectly smooth six-cylinder engine driving through a manual gearbox to a locked rear diff, with four big wheels aligned to point in the same direction.

Those wheels, incidentally, which come up to your shoulders rather than your head, are standard tractor affairs and built by GKN, the usual supplier, although they're the smallest fitted to a JCB tractor and constructed to a tolerance of less than 1mm, rather than the usual 3mm. They also carry wheel weights, up to 1kg, to balance the tyres, which tractors don't usually bother with because they don't go fast enough.

The tyres themselves still carry the 'A8' speed rating markings from the mould they're made in – which is a 25mph-rated standard tractor tyre. However, they carry two internal bands to limit exterior expansion to no more than 2mm at 150mph, they have more natural rubber in the compound and they have had their tread pattern buffed down to 10mm from the standard 27mm. We suppose they could have gone further but this is, after all, still meant to be a tractor.

Aerodynamic body addenda diverts air around a standard-shaped bonnet (it's aluminium rather than steel) and around a cabin that looks standard at a glance but is anything but. It has been reduced in width by 300mm and height by a further 200mm, so in all, its roof is 400mm lower than a normal Fastrac's.

Finally, then, to the details of probably the most important bit: the engine. In July, when JCB originally set the record, it had an engine that produced approximately 500bhp. It's a JCB 672 engine, an inline six-cylinder pushrod four-valve diesel, and its power was good enough for three figures. But to go half as fast again, they wanted twice as much power. Which meant things got very, very serious, very quickly.

The new engine has the biggest turbocharger you'll find fitted to a

● FIA-approved Cobra motorsport seat is straight racing-car specification and fitted with a five-point racing harness. Even with a helmet on, though, there's ample head room beneath the roll-cage.

Production one also world's fastest

JCB offers two base ranges of Fastrac tractor, the 4000 and 8000. Perhaps unsurprisingly, the Fastrac Two record tractor is based on the higher-spec 8000 unit.

The 8000 is the world's fastest production tractor, with a top speed of 43mph. Chief among the differences is that the WFT uses JCB's own engine, the 672 unit, which it puts in its own vehicles and sells to others (and is used in the 328mph Dieselmax land speed record car). The standard Fastrac 8000, though, uses an 8.4-litre engine from Finnish engine maker AGCO Power and it develops up to 349bhp and 1062lb ft.

On a regular Fastrac, that torque goes to all four wheels via a two-range continuously variable transmission – low speed up to 25mph when pulling, the higher speed from rest to 43mph in lower-stress operation. The wheels have reduction hubs, too, so the wheels are spinning more slowly than the transmission – not something the WFT gets. The production tractor has electrohydraulic four-wheel-drive engagement and locking front and rear differentials, and vast options for electric and hydraulic power take-off front and rear.

tractor. It produces 5.0 bar of boost and, as big turbos do, doesn't boost big until it has a lot of air going into it. So there is an electrically powered supercharger to keep the turbo spinning at low revs, while during gearshifts on what is a leisurely H-pattern 'box, there is a scuba-dive tank at the rear, which fires air at 100 bar into the exhaust and keeps the turbo spinning while the clutch is in.

So the big turbo is spinning all the time, which is ace. But a 141bhp-per-litre diesel generates lots of heat, which radiates into the intake air, which ideally you want cool. So there is a huge ice-cold water-to-air intercooler between the turbo and the intake manifold. JCB's engineers load that with 25kg of ice prior to each run, and by the end of a runway, it's all gone. But in the meantime, it's taking air from the turbo at 280deg C and cooling it to 10deg C before it comes out of the intercooler.

The air goes into the engine via standard inlet valves, into a cylinder whose compression ratio has been reduced from 18:1 to 11:1, via machining the tops of the standard pistons. They push on forged con-rods but do drive a standard crankshaft. The exhaust valves are the same size as usual, but because of the extreme combustion temperatures, they're made from a different material, after which gases reach an exhaust manifold that is 3D printed from Inconel because it reaches nearly 1000deg C. It glows red not just when the engine is on a test bed, but even when it's running at speed in cool air.

So all of that combined gives this machine performance that we'll come to in a moment but it also means it's incredibly fragile at those power outputs. After the record runs, JCB discovered some microscopic cracks and saw torque peaks of up to 3300lb ft acting on the propshaft. So the wick was, sadly but inevitably, slightly turned down for our test, leaving us a little over 500bhp to get on with. That's why the performance figures quoted here are from the record-setting runs, at which point in-gear the Fastrac Two will give a Ford Focus RS a run for its money at higher speeds. In the 500bhp form we ran it, and on a shortened runway, it still did 112mph and left a Ford Ranger Raptor in its wake.

INTERIOR

★★★★★

If the outside looks like a tractor that could have rolled in from the set of a science fiction film, it is pure race car inside. There's a single Cobra race bucket seat with head bolsters and a five-point harness and, around you →

in this fairly spartan cabin, there is polycarbonate instead of glass for the surfaces, with two escape hatches, a fire extinguisher and the biggest FIA-approved roll-cage we've seen bolted directly to the chassis. Fixed to that are a few screens: a Racelogic speedo hooked up to a GPS data logger, a tyre pressure and temperature sensor, and a big central screen, showing some temperatures and a rev counter.

To your right is the six-speed 'box, with magnetic sensors at the end of each gate because different gears get a different throttle and torque map so as not to destroy the diff or spin up the wheels (a very real possibility, terrifyingly). Behind that is a flat panel with light switches, display switchgear and the most important thing of all: the start switch.

PERFORMANCE

★★★★★

To start a conventional tractor, you turn a key, there's some whirring and, after a while, away it goes, because these machines have big batteries and compressors and an alternator on board. The whole thing is self-contained.

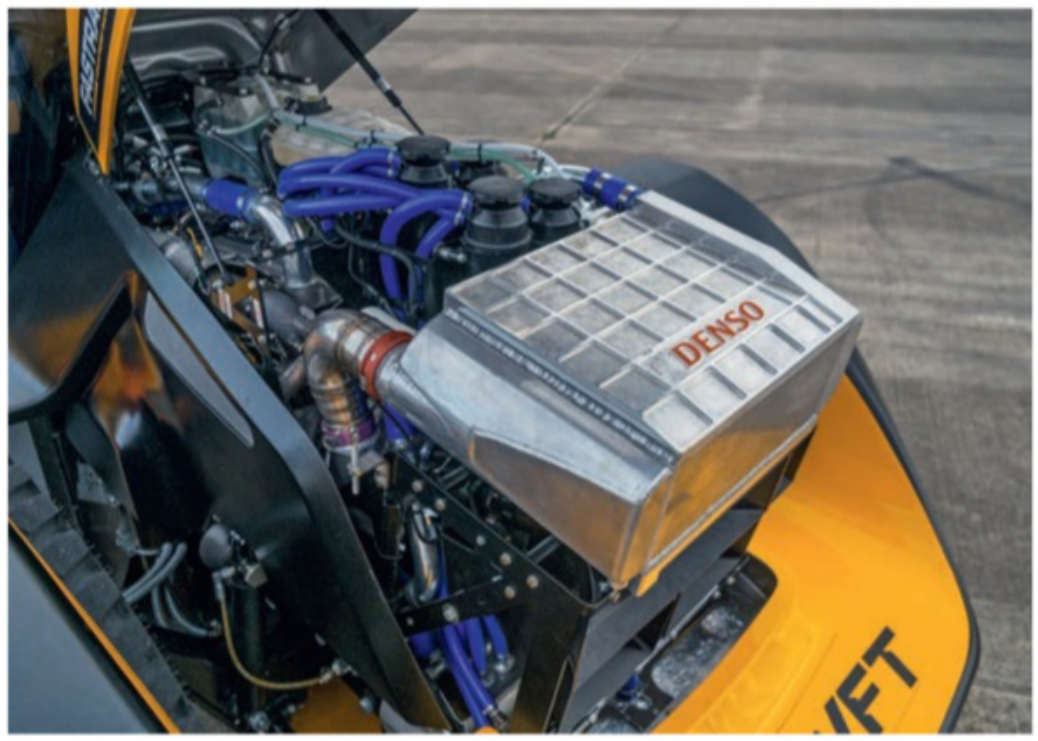
The WFT is not so simple because it has gone from being a machine you'd run all day for days on end to one you run briefly not very often. In taking it from nine tonnes to less than five tonnes, JCB opted to delete some equipment, in addition to giving it a lower and lighter chassis and making it slightly smaller. So there is no power take-off, for example, because there is no on-board compressor for hydraulics, or air. And, in fact, no alternator.

So to start the WFT, you have to hook it up to a generator or battery on a truck, which then follows it around in case you stall. Not that there's as much chance of that as is usual in valuable, rare cars, where a nervous owner will say: please, don't slip the clutch because it costs a fortune, wears out quickly and nobody makes them any more. It's different here. JCB designed an eight-plate clutch that runs in a huge bath of oil and is so robust that the way it is tested is to fit it to a tractor, running it at top speed while towing 20 tonnes, selecting reverse gear and slipping the clutch until the set-up is driving backwards.

So it can easily handle the WFT's five tonnes setting off from rest. JCB's engineers suggest you select second gear, wind on 2500rpm (max revs are at a 3400rpm hard limiter and 3000rpm is a good change-up point) and slip the clutch almost all the way through second gear while keeping those revs high. This is slightly easier said than done when the clutch pedal is so light and there is no discernible feel through it but, once rolling, it's that much easier.

Even with less than maximum power, this is still a powertrain with a very narrow operating window. Guy Martin has said you could drive off into a field and plough with the WFT, which sounds great but is not even close to accurate. Running this is like an agricultural-sized F1 car.

Because of the low compression ratio, combustion doesn't come easily



● JCB's 672 engine is a 7.2-litre straight six that puts out 1016bhp and 1770lb ft in record-run trim. Its 5.0-bar turbo is joined by an electrically driven supercharger.

> Even on a much shorter runway than the record run, we saw 112mph

● WFT uses more than 50% of standard Fastrac parts but the detailed motorsport-grade engineering, including streamlining and lightening, are more eye-catching.

● Williams Advanced Engineering was involved in the analysis and development of the WFT's aerodynamics, which includes a front splitter, belly plate and rear diffuser.

if temperatures are too low so there is a grid heater to pre-warm air at low speeds (yes, that's reheating air that has just passed through a massive intercooler), but this heater switches out as speeds and revs rise because the thinking is that there's sufficient heat to keep combustion going nicely. In between those two states, though – once the grid heaters are off but before the tractor is going flat out – it doesn't run happily. Unfortunately, that's exactly the sort of low, constant speed that we like to drive at for photos and video. Here, the Fastrac Two is such a smoking, banging, recalcitrant mess that at one point we thought it had exploded. If you want to run at tractory speeds, then, you can't: it likes to be at idle, or flat out.

And flat out, it's amazing. A support car like a Ford Ranger Raptor struggles to keep pace with it, even in its 500bhp tune. The performance figures on full power show it reaches 60mph from rest in 9.86sec, but the way this huge, five-tonne machine keeps on pulling is what's so impressive.

Even on a far shorter runway and with much less power than during the record run at Elvington, we saw 112mph, which would have made us land speed record holders earlier this year and still leaves us the second-fastest tractor drivers in the world (if you don't count JCB's in-house testers). Which is quite pleasing.

Once rolling, it's surprisingly easy to keep the WFT going fast. After gearchanges, the clutch and engine take-up is no more difficult than in a regular car, you'll never miss a gear on the big-gated manual gearbox and the in-gear flexibility comes without holes or torque gap. It's a smooth and responsive if noisy engine.

But then there's the stopping. There are air brakes, massively over-served, and the standard discs are just as up to the job of stopping five tonnes from 150mph a few times on a runway as they are nine tonnes plus whatever it's towing countless times on the road. But you'll remember we said there is no on-board compressor: instead, two air canisters on the back must be filled before each outing, because they provide air to the system, and once they're empty, they're empty, and you'll have no braking apart from an ineffectual parachute. The engineers think there are 40 stops in the tanks and they usually recharge well before 20. But still, worth remembering.

HANDLING AND STABILITY

★★★★★

The Fastrac Two runs nitrogen dampers on its three-link suspension, with live axles front and rear, and although the cabin is not suspended, ride comfort is pliant. Granted, we're only running it on a runway, not in a field.

The steering is hydraulic, with three turns between locks, and there is no direct mechanical link to the front wheels, so you can end up in a situation where the standard JCB steering wheel isn't showing straight even though the wheels are pointed straight. But the only truly weird thing about the driving experience is remembering that the rear wheels are locked, so the turning circle is a runway's width. It'll do tighter turns but I don't imagine the rear axle will thank you for it.

But whatever crosswinds or headwinds, despite the blocky shape of the machine, this is a straight-line monster. It's completely stable, with absolutely no drama whatsoever as you run it through the gears. Starting in second and getting through to fifth, it's huge testament to its engineering that it doesn't want to do anything other than track totally straight, despite all controls bar the throttle pedal being light. There's no great brake feel and it's a bit like a Dallara Stradale in that there's a lot of movement in the pedal. And you don't heel and toe: you just knock the stick into neutral and, when going slowly enough, slide it back into gear. It's an undramatic but deeply, deeply impressive driving experience.

BUYING AND OWNING

★★★★★

JCB is disinclined to say just how much it has spent on not just one but two tractors, but it clearly thinks it's worth it, not only as a marketing exercise but also, given it's an engineering-led company, as a technical exercise. There has been some help from Williams (aerodynamics) and Ricardo (engine), an existing JCB partner already, but there's no question this is an expensive machine to make and a complicated one to run. We started setting up the WFT at 8am and it wasn't ready until midday, having been in a hangar with heaters blowing at its important bits for several hours because the gearbox oil is uninterested below 70deg C. →

Data log

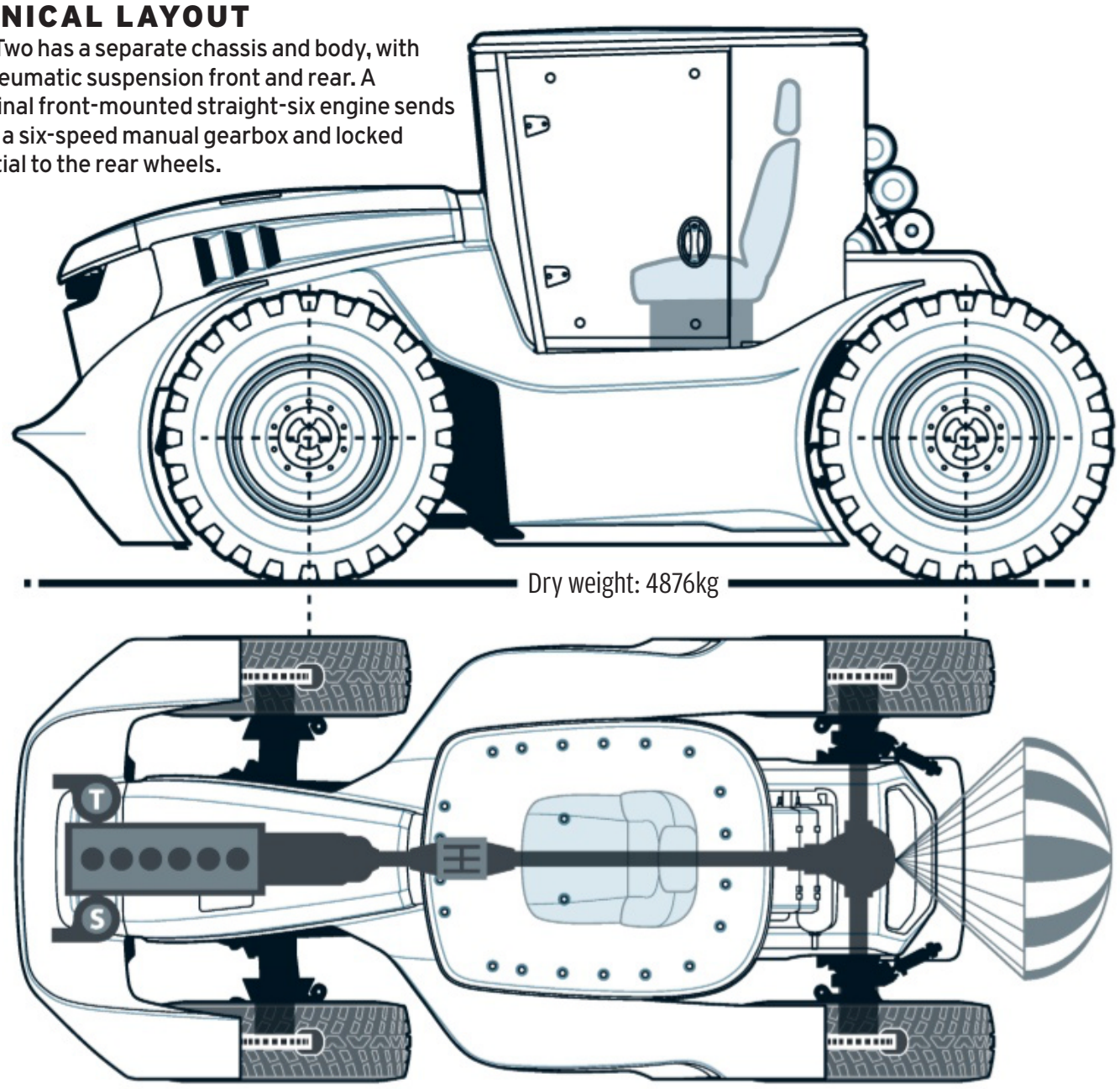
JCB FASTRAC TWO WORLD'S FASTEST TRACTOR

LED headlights	■
Digital instruments	■
GPS and data logger	■
Tyre pressure monitor	■
Tyre temperature monitor	■
Machine vibration monitor	■
5-point harness	■
FIA-approved seat	■
FIA-approved roll-cage	■
FIA-approved fuel tank	■
Aluminium bonnet	■
GRP body panels	■
Underbody pan	■
Rear diffuser	■
Adjustable dampers	■
Automatic gearbox	na
Air conditioning	na
Cruise control	na
ABS	na
Brake assist	na
Traction control	na
Power take-off	na

Options in **bold** fitted to test car
■ = Standard na = not available

TECHNICAL LAYOUT

Fastrac Two has a separate chassis and body, with hydropneumatic suspension front and rear. A longitudinal front-mounted straight-six engine sends drive via a six-speed manual gearbox and locked differential to the rear wheels.



TRANSMISSION

Type 6-spd manual, electronically controlled multi-plate wet clutch, rear-wheel drive, locked differential (no hub reduction gears and standard rear axle case)

Ratios
1st 6.345 **2nd** 3.769 **3rd** 2.259
4th 1.444 **5th** 0.805 **6th** 0.805
Final drive ratio 3.08:1

BRAKES

Front 470mm discs, twin calipers (60mm, 75mm)
Rear 470mm discs, single caliper (60mm)
Air over hydraulic, single charge (no compressor, air tanks needed)
Anti-lock None
Handbrake type None
Parachute Standard

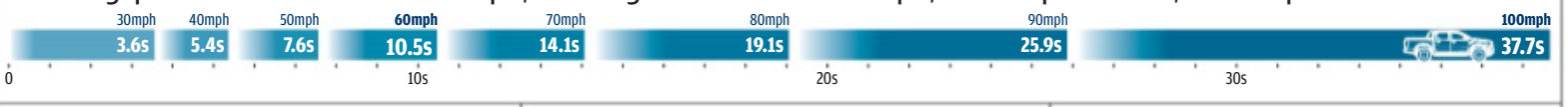
ACCELERATION

JCB Fastrac Two World's Fastest Tractor

Standing quarter mile 18.7sec at 95.1mph, standing km 29.2sec at 121.3mph, 30-70mph 7.4sec, 30-70mph in fourth na

Ford Ranger Raptor

Standing quarter mile 17.9sec at 77.8mph, standing km 32.9sec at 97.1mph, 30-70mph 10.5sec, 30-70mph in fourth na



STEERING

Type	Hydraulic
Turns lock to lock	3.0
Turning circle	40m

ECONOMY

TEST MPG **Track** 5mpg

Tank size 20 litres
Test range 22 miles

COOLING

50-litre ice tank
Side pod radiators for engine cooling
Ram air cooling
Twin electric water pumps

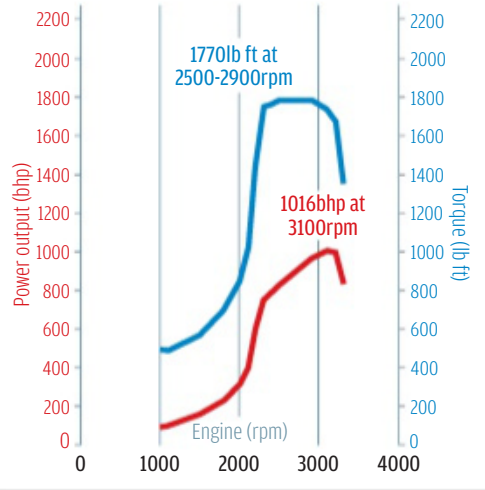
SAFETY

5-point harness
FIA race seat
FIA roll-cage

ENGINE

Installation	Front, longitudinal
Type	JCB 672, 6 cyls in line, 7.2 litres, turbocharged, electrically supercharged, charge-cooled, diesel
Made of	Cast-iron block and head
Compression ratio	11.0:1
Valve gear	4 per cyl, pushrod
Power	1016bhp at 3100rpm
Torque	1770lb ft at 2500-2900rpm
Redline	3300rpm
Power to weight	203bhp per tonne
Torque to weight	356lb ft per tonne
Specific output	141bhp per litre

POWER & TORQUE



ACCELERATION

MPH	TIME (sec)
0-10	0.7
0-20	2.1
0-30	3.8
0-40	5.3
0-50	8.7
0-60	9.9
0-70	11.2
0-80	15.2
0-90	17.4
0-100	19.7

Standing quarter mile	18.7sec at 95.1mph
Standing kilometre	29.2sec at 121.3mph

CHASSIS & BODY

Construction	Steel chassis, GRP body, aluminium bonnet, polycarbonate windows
Weight	4876kg (dry), 4975kg (wet)
Drag coefficient	0.48
Frontal area	4.5m²
Wheels	GKN 28in, welded steel
Tyres	BKT 400/80 R28
Spare	None

SUSPENSION

Front and rear Adjustable hydropneumatic, front anti-roll bar

THE SMALL PRINT Power-to-weight and torque-to-weight figures are calculated using manufacturer's claimed kerb weight. © 2019, Haymarket Media Group Ltd. Test results may not be reproduced without editor's written permission. For information on the Fastrac Two WFT and less esoteric Fastracs such as the 4000-series and 8000-series, contact JCB Information Centre, PO Box 45, Uttoxeter, ST14 7GZ (0800 083 8015, jcb.com). Cost-per-mile figures calculated over one day/several lengths of a runway and include a team of highly talented engineers, the hire of a runway and a hangar, the use of a support vehicle and plenty of 25kg bags of ice but do not include the cost of a film crew – or the tea and biscuits consumed by an Autocar road test team, which can bankrupt the economy of a small country. Insurance quote covers anyone brave enough to drive a tractor at 150mph, irrespective of profession, driving licence record, no-claims bonus status and sanity or lack thereof. Please remember: do not try this at home, unless you happen to be Lord Bamford. Happy Christmas.

AUTOCAR ROAD TEST No 5452

Read all of our road tests autocar.co.uk

VERDICT

★★★★★

The best way to do 150mph in five tonnes of British engineering

What's so refreshing and exciting about spending time with Fastrac Two is not just the machine itself, but also meeting the engineers who arrive with it, who designed it, who put it together and who run it. JCB has put a small, talented and young team in charge of the project in a similar fashion to the way Lamborghini put brilliant young engineers, designers and test drivers in charge of developing the Miura. And beyond the headlines and the JCBWFT hashtags and the TV programme and even the record itself, their experience matters most. Because although JCB knows that creating the world's fastest tractor has benefit to it as a marketing tool, it also has massive merit as a technical exercise, and in the world of agricultural and construction equipment, engineering counts for more than styling, marketing or advertising.

So here's to a five-star speed record, a five-star machine and its five-star engineers. If you want to do 150mph in a tractor, there's nobody we'd trust more.

Testers' notes

It's just about possible to climb up the rear tyre and swing into the cabin without stepping on the fragile body but easier to use a small set of steps.

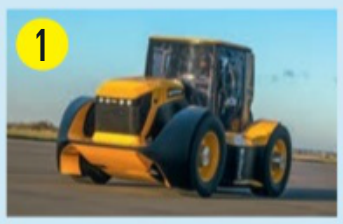
Although glass has been swapped for Plexiglass, standard door catches remain. Plus taped-in escape hatches.

Jobs for the facelift

- Fit some steps
- Broaden the operating window
- Refit a big hitch to go for a towing record. Your correspondents are available to drive

ROAD TEST RIVALS

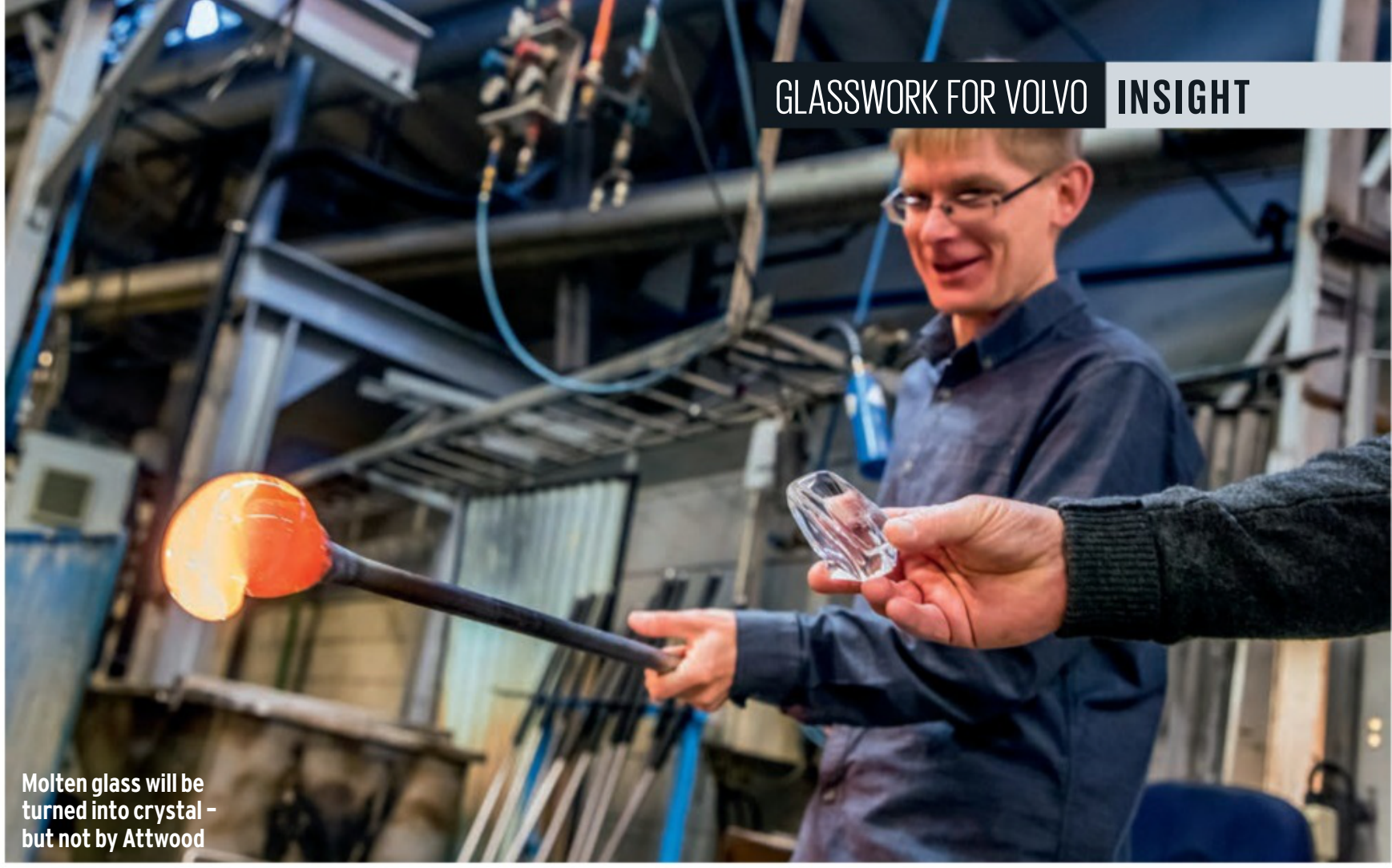
Verdicts on every new car, p154

	1	2	3	4	5
					
	JCB FASTRAC TWO WFT Based on the 8000-series Fastrac, it's the best and, in fact, only way to do 150mph in a tractor at the moment. Exquisitely built, and hard to run. It's like an F1 team and car, only made much, much bigger.	**ALLIS CHALMERS D19** Ohio father and daughter tractor pull race veterans hit 108mph in their vintage Allis. They told farms.com "they'll be waiting" if anybody else comes along and goes faster.	**LEBLANC TRACK-TOR** Some motoring programme's 'tractor', with a 500-horsepower 5.7-litre Chevrolet engine. Not entirely clear how much tractor there is beneath the orange paint. Currently SORNed.	**JCB FASTRAC 8330** The world's fastest production tractor can pull 10 tonnes across a field and yet is still fully suspended, comfortable and as capable as some trucks on the road. A great British machine.	**BIGTRAK** Programmable six-wheeled electric toy that could trailer an apple to your dad, according to the adverts. Harder than it looked to achieve top speed without running into a sideboard.
Engine	6 cyls, 7.2 litres, turbo, diesel	4.3 litres, "modded quite a bit"	V8, 5.7 litres	6 cyls, 8.4 litres, turbo, diesel	Electric motors
Top speed	135.19mph	108.5mph	87.2mph	43mph	0-the 1980s: immediately

BEST IN GLASS

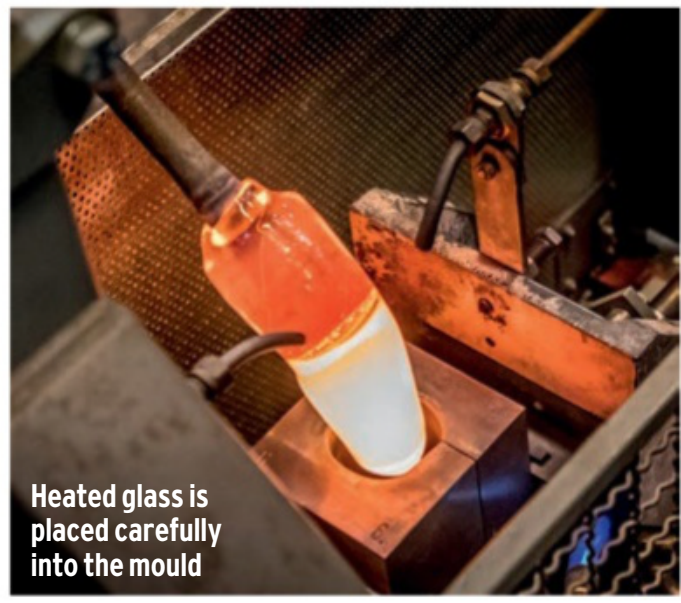
Amid all the high-tech, some Volvos have an exquisite gear selector made from crystal using processes and skills that are centuries old. **James Attwood** sees how it's done

Volvo gear selector (inset) has a fiery, laborious gestation



Molten glass will be turned into crystal – but not by Attwood

Hot room has many furnaces, each with a team of four



Heated glass is placed carefully into the mould

When the glassworks in the small Swedish town of Kosta was founded, its owners didn't foresee it would one day make gear selectors. It was 1742, after all, when demand for car parts was somewhat limited.

Yet 277 years later, Kosta's hot shop is an unlikely hotspot for the production of Volvo gear selectors. Not regular gear selectors, of course: Orrefors Crystal Eye units are handmade from crystal glass, forged and shaped using tools and techniques that are near identical to those employed in the 18th century.

They're beautiful, terribly fancy and, of course, entirely unnecessary: swapping a regular selector for a glass one doesn't improve the shift times of an XC90 Inscription at all. But they're increasingly popular and Volvo is widening their availability in its range.

"I loved the idea of taking something from outside the industry and bringing it into a car," says Anders Bergström, a colour and materials designer at Volvo. "We wanted to build on our Scandinavian heritage, which gave me the idea to use crystal glass."

A gear selector works, Bergström says, because "it needed to be a big lump. The beauty of crystal glass is that you see it come alive. The gear selector is in the centre of the car and you touch it, so you feel the material and enjoy it that way as well."

Amazingly, it took 10 years to turn that idea into reality. To find out why, we headed deep intro rural Småland, the heart of Sweden's Glasriket – the Kingdom of Crystal.

Natural resources – silicon-rich sand and ample forests to provide fuel – nourished the glass industry there and dozens of glassworks are dotted around the region.

The town of Kosta is named for the founders of the glassworks there. The nearby town of Orrefors gained its own glassworks in 1898. The Orrefors and Kosta Boda firms merged in 1990 (consolidation isn't just a car industry trend) and, since 2013, their handmade operations have been combined in Kosta.

The town is, predictably, dominated by the glass industry: the Kosta's Art Glass Hotel, for example, features a glass bar, glass sculptures of food on the breakfast buffet and glass artwork on the bedside tables (our review: not child-friendly).

The hot shop is the heart of the Orrefors-Kosta Boda operation. Inside are a number of large furnaces, each of which is the centre of a glass production line. It's a far cry from a modern car factory, with no robots or automation. Everything is done by hand.

Each furnace is crewed by a team of four and two teams make two types of Crystal Eye: one for the Volvo XC40, and a larger one for the XC60, XC90 and V90. "Bigger cars need a bigger selector," says Bergström. "It's a bit posher."

A glass gear selector starts life as sand. The lead-free pelleted batch is prepared locally by sibling firm Glasma to what Lars Sjögren, head of the Crystal Eye production team, calls "a special secret recipe". Yes, secret sand. "It's →

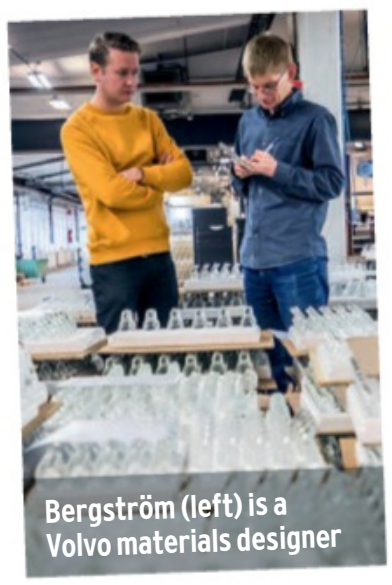
Volvo and Orrefors first collaborated on the 2009 S60 Concept, which featured a one-piece glass dashboard. They've also launched a Volvo-branded tableware range.

Sjögren (left) withholds a couple of secrets

STUART PRICE

Formed pieces are rotated as they are cooled and heated

The flawless ones spend eight hours in an annealing lehr



Bergström (left) is a Volvo materials designer

← all about the mix of elements," says Sjögren.

The first task is to melt the secret sand, which takes 16 hours at 1400deg C and is done in a clay pot in each furnace. Because of the limitations of how much sand can be melted in a pot, each team uses two furnaces, swapping halfway through each day. Once the sand is melted, the oven is turned down: at 1400deg C, molten glass is too hot to work with. At 1180deg C, apparently, it's just right.

Production begins with a glass maker expertly hooking a suitably sized lump of molten glass onto the end of a metal rod and carefully lifting it to a bench, where it's rolled roughly into shape.

It's formed into its gear selector shape using a cast-iron mould before being placed on a rack. It's then rotated while it's moved down a line, variously being cooled by a fan or heated by a flame. It looks random, but it's science: the process strengthens and polishes the glass.

On a frequent basis, a glassmaker will pause, look closely at the gear selector they're working on, sigh slightly and then plunge the metal rod into a nearby bucket of water. That's a rejection and the standards are exacting. The team makes around 50 units an hour, but only 35 or so will make the cut.

According to Sjögren, employees spend at least five years at the firm before they even start to learn glassmaking. Most have been there for decades and focus on a single product. At this stage, I've been in the hot shop about 30 minutes but am still determined to try.

A glassmaker eventually allows me to 'help' by carrying a rod loaded with a molten glass selector from one station to the next. He helpfully warns me that it's hot (although the glowing molten glass on the end is a clue). I feel I'm doing a decent job of twirling the selector, although every unit I go near is then dumped straight into the water bucket. I succeed only in bumping up the rejection rate.

The surviving gear selectors are placed into an annealing lehr, a sort of oven in which the glass is put through another heating and cooling cycle, emerging eight hours later at room temperature. Then the Orrefors logo is printed on the XC40 selectors and on the larger unit is created inside it in a 3D effect. Sjögren won't explain how. It's another secret.

Once that's done, there are more checks by another expert glassmaker, who minutely examines each selector. Next to him is a bin filled with gear selectors that failed to meet his standards. The most common fault? "Bubbles," says Sjögren, with a shudder. Sjögren *hates* bubbles. "If there's one bubble, we'll reject it."

Since I clearly have no future making glass, perhaps I can help with quality control. Except, rummaging through the rejection bin, I find units with bubbles so small that

> "The first task: melt the secret sand, which takes 16 hours at 1400deg C"

Although the firms have merged, the Orrefors and Kosta Boda brands remain separate. Orrefors focuses on crystal glass, Kosta Boda on coloured glass.

Attwood has a go at telling his glass from his elbow

Orrefors has produced tableware for Swedish royal weddings, a Nobel prize banquet and numerous Michelin-starred restaurants – and trophies for the Eurovision Song Contest.

I can only see them when Sjögren points them out.

Fortunately, the high rejection levels don't create waste: rejected units are simply melted down and used again. "Sustainability is really important to us," says Sjögren.

By Sjögren's count, each gear selector is checked at least six times before being shipped to Volvo, ready for installation into a car. The multitude of checks is partly for standards, and partly due to the challenge of meeting the exacting regulations required for car parts.

"It's not easy being a supplier to a car firm," says Sjögren. "We have to be able to guarantee the production of every gear selector is the same. We're not an automobile manufacturer: we make glass tableware. It took a lot of help from Volvo to sort."

The gear selectors also had to undergo extreme temperature tests and prove they could survive when a Volvo was driven on extremely bumpy roads – not tasks usually required from, say, a champagne glass. So far, not a single selector has broken. "It will never happen," says Sjögren. "Never, never, never."

Both companies think the effort is worth it. "It's helping us to become more innovative and raise awareness of our firm," says Orrefors boss Ulf Kinneson. "It shows what else we can do."

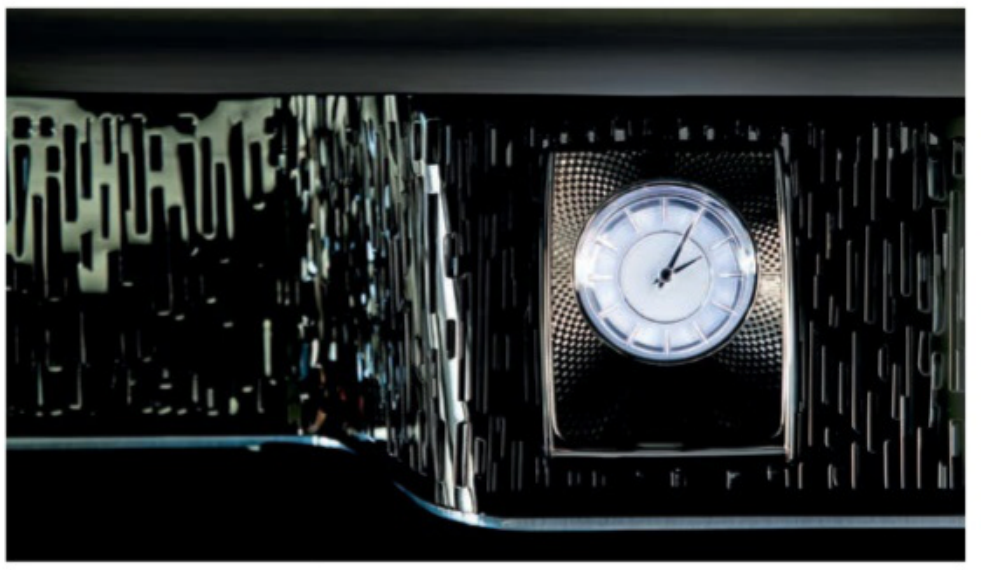
The pride shines through, as does the amount of effort that goes into production – for something that is, essentially, entirely unnecessary. Except that in a world ever more focused on technology, the glass gear selectors are a tangible link to something more solid. "It's something real customers can hold onto," says Bergström. "Crystal glass is a cutting-edge, timeless material – but we're using it in a new way." A

IT'S A MATERIAL WORLD

Crystal glass isn't the only unusual material you'll find inside new cars

GOING FOR GOLD

If crystal glass isn't exclusive enough, how about making car parts from gold? That's what McLaren did when it created the F1 back in 1992. Borrowing concepts from its grand prix cars, it finished the heat shield for the F1's V12 engine with gold foil. That wasn't just to show off: gold is excellent at absorbing heat.



GOING BEYOND GOLD

But if gold still isn't exclusive enough, how about ruthenium? It's an ultra-rare precious metal from the platinum group, with only a limited amount produced. It's used to craft the 'gallery' of the ultra-luxurious Rolls-Royce Phantom Gentleman's Edition, created by the British firm's Bespoke arm.

BENTLEY'S 4800-YEAR-OLD INTERIOR

Bentley teamed up with the Fenland Black Oak Project charity, which is creating a 13-metre table out of a 4800-year-old Fenland Black Oak reclaimed from former swampland in East Anglia. Strips of the material featured inside the Bentley EXP 100 GT concept car – although given the scarcity of the wood, wider usage is unlikely. Still, wood is an integral part of many cars: Morgan machines still feature frames crafted from ash.

SEATBELTS MADE FROM SEATBELTS

As sustainability becomes more important, car firms are increasingly using recycled materials in their cars. The new Renault Zoe features seatbelts and other interior trim produced using a recycled fabric made from plastic bottles, textile strips – and old Renault seatbelts.

COLIN'S GRAND DAY OUT

A day out for the enthusiast doesn't have to mean race tracks and motor shows. **Colin Goodwin** heads off early

PHOTOGRAPHY LUC LACEY

Please join me for an enthusiasts' day out in which we make a small tour of some of my favourite establishments. Editor Mark Tisshaw has given me a free hand to go where I want in what I want. This is going to be a day escaping from all talk of connectivity, fast charging and autonomy and from testing bland and dull-to-drive Korean and Volkswagen Group SUVs and crossovers, all of which have snuck into my professional life uninvited.

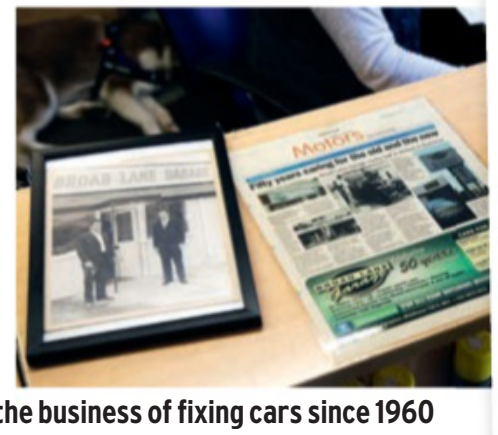
I've chosen something very much the opposite of a Volkswagen T-Cross: a brand-new Chevrolet Camaro, supplied by Ian Allan Motors down the road in Virginia Water. Ian Allan is the only official GM dealer in the UK and is the establishment that lent us a Corvette in which I had a very pleasant day driving from Brooklands to Brighton earlier this year (Autocar, 26 June). The Camaro has the same engine as the 'Vette. So let's fire up the 6.2-litre V8 and select D for our first port of call.

In the past two years, both of my local garages have shut. They weren't dealerships – that wouldn't have been a great loss – but traditional garages staffed by mechanics who really knew what they were doing. The sort of place that would remove a broken-off stud in a cylinder head in exchange for a pint.

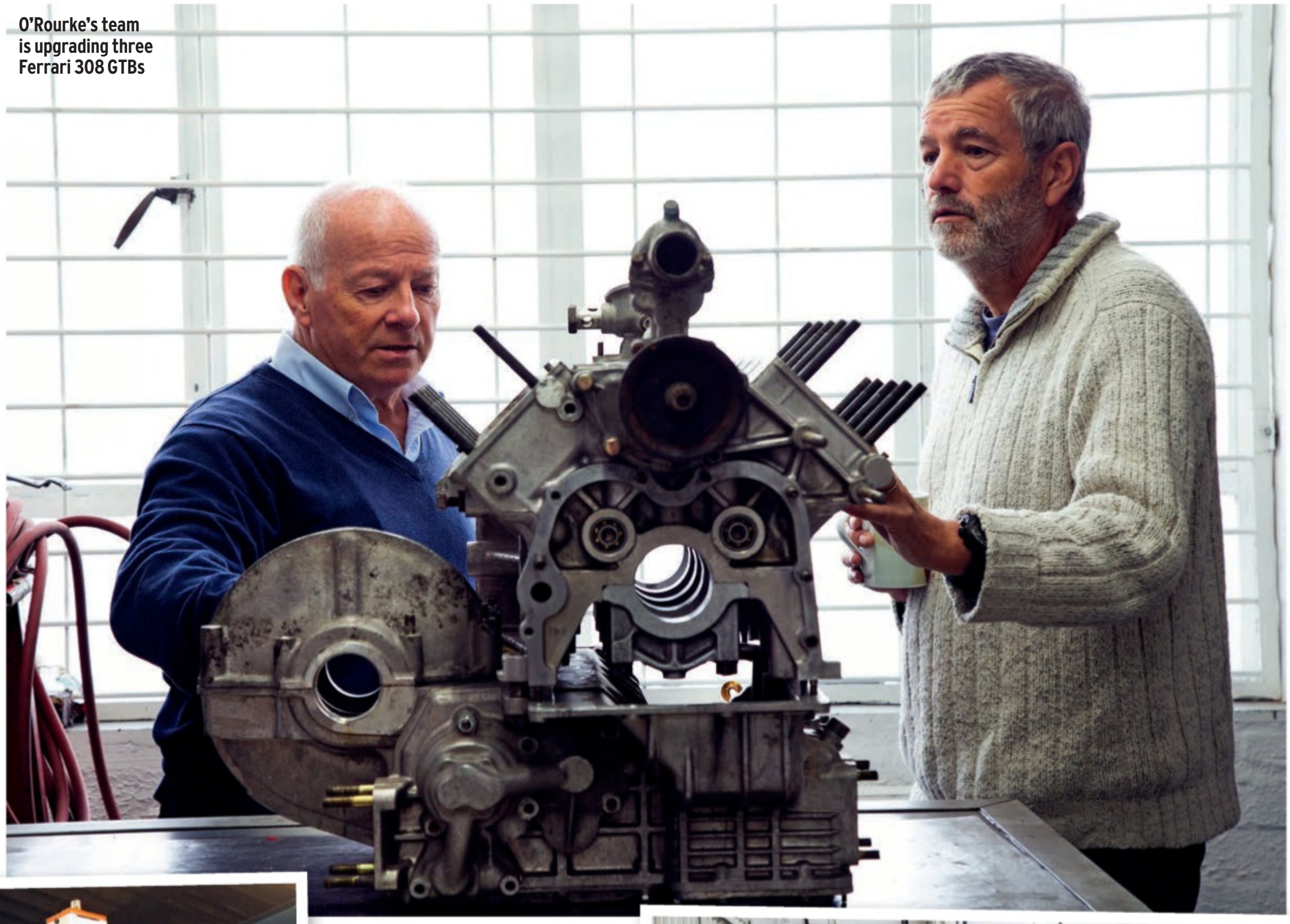
But it's not all disaster because, just a bit farther away from home, still in Hampton and still within walking distance, is Broad Lane Garage. It is one of the coolest garages I've ever seen. Its small yard always contains something interesting, like a '50s Buick, a beach buggy or, as it does today, a family tree of VW vans. There are two split windows, a bay window and several T4s. I'm having a cup of tea with Mike Scotney who, along with his sister Jane, runs the garage that their father founded with a partner in 1960.

Scotney doesn't just cater for the enthusiast, he is one himself. In reception, there's a flathead Ford V8 bare block, a more complete version of which is in Scotney's own toy. "I've got a Model T roadster with a '37 flathead V8 in it," he explains. "I take it down to Pendine Sands for the hot-rod races. I tow it behind my 1949

> "I've chosen something very much the opposite of a T-Cross: a Chevy Camaro"



Broad Lane Garage in Hampton has been in the business of fixing cars since 1960



O'Rourke's team is upgrading three Ferrari 308 GTBs

Chevrolet Station Wagon. It's known as a Tinnie and is the cheaper version of the famous 'woodie' wagon, which is what I'd really like to own."

I'd love to spend longer with Mike and Jane but we've got more people to see. Next stop is only about 10 minutes away, an outfit called Moto Technique, hidden away on a light industrial estate in West Molesey.

I've been a regular visitor at this place for more than 30 years and have been mates with founder Kevin O'Rourke for the same length of time. He and his team have restored some incredible machines over the years. I've seen at least two 250 GTOs having ground-up restorations, along with dozens of other Ferraris, Lamborghinis, Maseratis and pretty much any exotic you care to mention being brought back from the dead to be concours winners.

O'Rourke has shifted with the times. Restoration has always been the core business but a few years ago Moto Technique did a lot of insurance work. I remember a crumpled F40, and a 288 GTO before that.

O'Rourke's current passion is restomods. Lined up in the squeaky-clean workshop are three Ferrari 308 GTBs, each undergoing tasteful upgrading. The green one has strengthened wishbones, 360 Modena brakes and a Moto Technique-manufactured carbonfibre engine lid that saves an enormous amount of weight. →

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Q2

"Just a note to say the rearguard arrived promptly, was fitted easily and it looks as if it was a factory fit/look. Third one I have fitted to our cars and wouldn't be without them. The carbon effect looks really good on our grey Audi Q2. Excellent service and product."
Mr MJ, Audi Q2

VOLVO
V90

"Just wanted to praise the quality of a rear bumper protector that I purchased for my Ford Mustang. Absolutely delighted... looks really good and the fit is perfect... BRILLIANT... totally satisfied. THANK YOU."
Mr AM, Ford Mustang

FORD
MUSTANG

MINI
COUNTRYMAN

"I would like to say a 'big' thanks for the quick despatch of my order. I have fitted it and must say it looks as though it was OEM. Thanks again for a great product and price."
Mr P, Kia Sorento

NISSAN
QASHQAI

"Half the price of getting the bumper resprayed. And available in black or silver (and now brushed alloy look and carbon look). I thoroughly recommend them."
Mr PG, Mercedes E Class Estate

"Every VW driver should have RGM Rearguards to protect their painted rear bumper."
Neil Birkitt, Editor,
VW Driver Magazine

HONDA
CIVIC

"I would like to express my appreciation of your product. The delivery was prompt. The instructions comprehensive and the fitting easy. What more could I ask?"
Mr MH, Ford Mondeo Estate

SKODA
OCTAVIA

VW
T-ROC

"Thanks for the speedy delivery of a Rearguard for my Honda CRV. It's increasingly rare to find a company that produces an item that fits perfectly with no hassle. Your quality control must be very good indeed. Well done."
Mr JH, Honda CRV

PORSCHE
MACAN

"I ordered a rearguard by telephone for a Skoda Octavia Estate (my dog van) on Monday. It was delivered to the North of Scotland early PM on the Tuesday! Easily fitted same day. First class service"
Mr AF, Skoda Octavia Estate

"I ordered a Rearguard for my wife's Hyundai i20. It arrived in 48 hours! Came with simple instructions and was fitted in literally 5 minutes. Great product, fantastic service, I can't believe I've never had one on previous cars. Many thanks"
Mr GF, Hyundai i20

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"Thank you for my order of a rear bumper guard for my 7 seater Grand Picasso. perfect fit, covers a wide area of the bumper, looks great and was well worth waiting for. Well done all of you at REARGUARDS."
Mr BD, Citroen Grand Picasso

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Derek Bell (above, on right) was at Goodwood. He kept smiling despite a quick spin

Off in the even cleaner engine shop, a thorough reworking of the cars' 3.0-litre V8 is taking place. They're bored and stroked and fitted with throttle body injection and a full engine management system. I've driven a 246 GT that O'Rourke had given the engine management treatment to and it was transformed. His own Dino is fitted with an F355 engine and is a work of art. These 308s are going to give their owners a lot of pleasure.

If I have an interesting car to test (and it's sadly rare these days – see dull crossovers and SUVs), then I head down into Sussex to Goodwood for a sarnie and the hope of seeing something interesting circulating the track – which is what Luc Lacey and I decide to do today.

The Camaro most definitely fits into the 'interesting' category. It's a wonderful car to drive slowly. I much prefer Chevrolet's pushrod V8 to Ford's 5.0-litre overhead-cammer in the Mustang. Kevin Hurl at Ian Allan will sell you one of these gems for only a few quid over £40,000. When he's run out of his stock of coupés and convertibles, it's unlikely that any new Camaros will come to our shores. It's not even certain that Chevrolet will continue to build its iconic pony car for much longer.

We're in luck. There seems to be some sort of manufacturer-customer day in progress at Goodwood. McLaren is here with a few 720Ss, Aston Martin has a Vantage wearing the company's famous AML 1 numberplate, Ferrari has a 812 Superfast and there's a Singer here too. Aside from the Singer 911, I'd rather have the Camaro than any of these exotics.

More luck, Derek Bell is here. Bell is a constant presence in our world, popping up like Zelig at car launches and various events. If you've had the pleasure, you'll know what a warm-hearted bloke he is. "You'll never believe it," he exclaims. "I've just spun that BMW M4 at Madgwick." If I'd come out with this sentence, the world would have replied 'and so?', but D Bell losing it is unusual. "It's modern steering: no feel for what the car is doing." Quite.

We must crack on as we want to be at our next stop for afternoon tea. We've got to negotiate the A27 east of Brighton and then head north to the village of Buxted in East Sussex, home of Crosthwaite & Gardiner. Put simply, this outfit is one of the finest automotive engineering →

There's no other country in the world that has so many cool places for the enthusiast to visit in a day. That said, you could do the same sort of day out in Los Angeles, visiting hot-rod and speed shops. Now there's an idea...

Goodwood was playing host to a dealer day, with plenty of top-notch exotica to gawp at

OTHER OPTIONS

A lifetime of being around cars has blessed me with a fat address book, and there are lots of options for future tours like today's. Next time I might head west, drop in on Nick Mason (like Derek Bell, arch-enthusiast Mason pops up everywhere) and kick the tyres of his amazing collection that's based in Gloucestershire. Then visit a company nearby called Retro Track & Air, which is a bit like Crosthwaite & Gardiner but specialises in rebuilding Rolls-Royce Merlin engines. I'd finish the day with a blast up the Fosse Way to Caffeine & Machine.

More amazing Road Tours in 2020

Corsican Adventure

10-15 May 2020.

£2400 per car (2 people).

Offer price until 1/1/20.

Normal price £2600.

The event is a 2000 mile, 6-day road tour that travels to Chalons-en-Champagne, Mont Ventoux, Corsica, including crossing the island west to east and south to north along purely mountain roads, the Col de Turini, the Col du Galibier and Challes-les-Eaux. All cars are welcome.

Alpine Adventure

2-7 July 2020.

£2700 per car (2 people).

Offer price until 1/1/20.

Normal price £2900.

The event is a 2000 mile, 6-day road tour that travels to Lake Lucerne, the San Bernardino Pass, the Umbrail Pass, the Stelvio Pass, the Bormio Pass, Innsbruck, the Grossglockner Pass, Villach, the Austrian F1 GP at the Red Bull Ring, Salzburg and the Nürburgring. All cars are welcome.

Pyrenees Adventure

18-22 September 2020.

£2100 per car (2 people).

Offer price until 1/1/20.

Normal price £2300.

The event is a 2000 mile, 5-day road tour that travels to Bordeaux, Lourdes, the three highest passes in the Pyrenees including the Col du Tourmalet, Port d'Envalira and Port de Pailheres, Ax-les-Thermes, Andorra la Vella, Ripoli, the Millau Viaduct, the Massif Central and Vichy. All cars are welcome.

To book visit www.circuit-days.co.uk

companies in the world. A bold statement but, given that Mercedes-Benz and Audi trusted the company to build replicas of their Silver Arrows racing cars, the claim is somewhat justified.

Dick Crosthwaite, who set the company up in 1969 with the late John Gardiner, is now semi-retired and his son Ollie runs the business day to day. There is much going on at C&W that we're unable to photograph or talk about, but that doesn't overly restrict us as there's plenty to gawp at and ogle. The machine shop is fascinating, with cutting-edge computer-controlled tools producing parts to ridiculously tight tolerances.

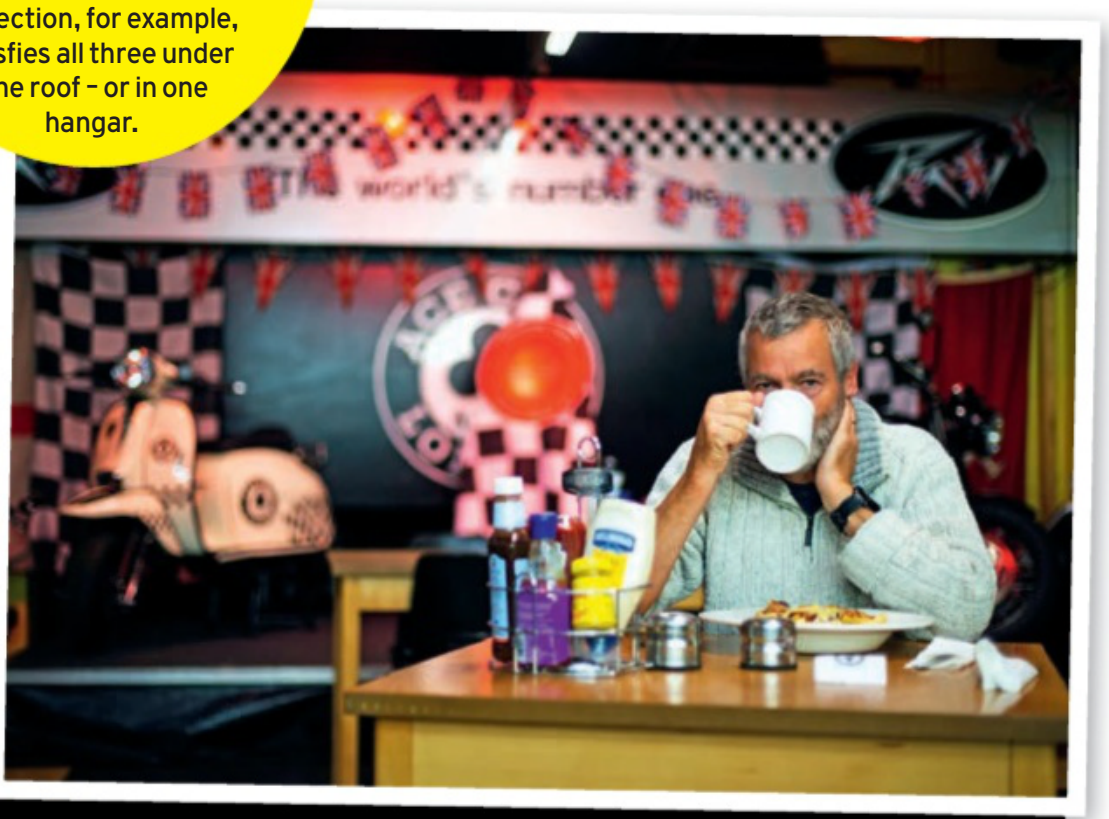
A trip around the stores is worth another couple of hours of our time. Beautifully turned nuts (with integral washers) for Bugattis, brand-new D-Type cylinder heads. Talking of which, C&W will supply a brand-new E or D-Type racing engine ready to go. Or a 2.5-litre Coventry Climax engine for a Cooper or Lotus F1 car. Then there's the room where hundreds of patterns are kept. The last time I felt this in awe of history, I was standing in the Museum of Cairo.

Dick Crosthwaite might be retired but he can't keep away. He was pottering about the place when I last visited and he's here today. He's full of stories, as is Ollie. I could stay for hours but Lacey and I have to hit the road again.

We're winding up our day out with supper at the Ace Cafe on London's North Circular Road. The cafe holds a meeting virtually every evening and tonight it's British sports cars and performance cars. Our Camaro fits the latter category, then. The traffic is horrendous on the A40 into town (we went north on the A22 from Buxted and then followed the M25 around to the M40), and I'm beginning to wish we'd not bothered and instead stayed longer chatting cars with Dick and Ollie. I've been to the Ace Cafe when its car park was rammed, but that was on a balmy summer's evening. Tonight there's just us, a TVR Griffith and an Aston Martin Vantage. London is so busy these days that unless you're local to the Ace or come by motorcycle, it's a nightmare to get to. It's a pity that Caffeine & Machine is a bit too far away.

But never mind, it's been a great day out. A simple one with friends met, lots of coffee drunk and good company in a great car that's full of character. There will be lots of grand days out in the future.

If, like me, and my great friend Steve Cropley, you love not just cars but also bikes and aeroplanes, your options for great days out are virtually limitless. The Shuttleworth Collection, for example, satisfies all three under one roof – or in one hangar.



Crosthwaite & Gardiner are recognised as world leaders in automotive engineering

"The Ace Cafe holds a meeting virtually every evening"

THE AGE OF INNOCENTI

In the 1970s Innocenti pulled off its own Italian job with a reworking of the Issigonis icon. **James Ruppert** celebrates the Mini's 60th by tracking one down

PHOTOGRAPHY LUC LACEY

> “I asked about ‘ruggine’ – that’s Italian for ‘rust’”

EXPORTING FROM ITALY

You need the Italian registration papers, a declaration of sale (signed at the local ACI office), Italy’s MOT equivalent and UK insurance (use the chassis number). Cool Italian number plates belong to the seller: you need their permission to drive off with them and they must trust you to post them back once you’re home – or you hang around for days for export plates. In the UK you have 14 days to notify HMRC via its online NOVA service. No import tax on EU cars over six months old. Get an MOT and complete the V55/5 form to register, which costs £55.

Happy birthday, Mini. How could I possibly celebrate? I did toy with the idea of driving my Mini Cooper to Izmir, now in Turkey and the birthplace of Sir Alec Issigonis.

Alternatively I could hack out another Mini book and cash in on the anniversary. I really fancied the idea of buying an original Mini and not being charged extortionate ‘classic’ car tax, as it’s an expensive business.

If I was going to get another Mini it would have to be different from my Cooper. A Moke would be fun but not cheap, but I could make a business case for any commercial. Otherwise, real-world money buys a dreary ’90s Mayfair. So I would have to look further afield for a Mini I don’t actually need.

Once the idea of buying a Mini, and specifically a different Mini, was inside my head, the search was on for an Innocenti. Here was a Mini that didn’t actually look like a Mini. This was December last year and none was for sale in the UK. There didn’t appear to be any in Europe, either – well, not the pure early example I had in mind. The later Daihatsu ones and turbos were around, but by then it wasn’t exactly a Mini. Then I spied a bright red example on autobelle.it.

I was barely a couple of minutes into looking for an Italian Mini and already I was sending a message asking for more details. Yes, that escalated quickly. From the pictures – and the seller emailed dozens – it looked very straight and rather perky. Plus there was some supporting documentation that suggested the car was exactly as described: a 1977 Innocenti Mini 90 SL. The money being asked was roughly mid-’70s rusty Mini City, if you’re lucky. I did feel lucky. I also had to put a lot of trust in Google Translate.

I asked about ‘ruggine’ – that’s Italian for ‘rust’, if you haven’t guessed. I established the seller wasn’t a dealer, just an enthusiast who needed the space. I think. The car lived in Bologna and, tempted as I was to buy unseen and get it helicoptered home, the reality was that I had a wonderful excuse for a trip to Italy, and I was rather keen to drive it back.

We exchanged emails over Christmas and in my head I was planning the return leg over the Alps and through France. Should I sleep in the back? Take camping gear? It →

Ruppert’s Innocenti is all original and, for the most part, in order

Paperwork is in order. Bodywork not so good

WHAT WE'VE ADDED TO OUR GARAGES THIS YEAR

HOW TO REPLACE A 10-YEAR-OLD MONDEO

Have you any idea how difficult it is to find a replacement for the 10-year-old Mondeo estate? Neither did I. From first thoughts to an actual purchase, it took me 12 months, 11 months of which was increasingly intense internet research, followed by a couple of weeks of frenzied train travel.

The Mondeo came from a far-distant Ford dealer in Castle Cary, Somerset, sight unseen. What I wanted was a big estate, petrol and automatic. For a post-2008 car, this was a tricky brief. After 2009 diesel incentive taxes kicked in, few petrol-powered estates were registered. My budget was also limited to roughly how little I could get away with.

For two years before Ford launched its 2.0-litre petrol turbo engine, the Mondeo was sold with a 2.3-litre Mazda four-pot. It was mated to a six-speed torque-converter auto. The well-kept example I'd found was a modest Zetec, but it had the dual-zone climate control that is essential when my partner is in the passenger seat. I bought it at seven years old and 60,000 miles.

It turned out to be a gem. Autocar loved all generations of the Mondeo. The car handled well and rode really well when fitted with a set of superb Michelin Cross Climate tyres. Snake-hipped, wonderfully pointy, surprisingly refined, a huge load bay and a nice rigid body. Terrible in-London economy, basic radio and seats, very moderate poke and no parking sensors were its downsides.

Finding big, modern-ish petrols isn't easy

After three years its replacement had to be a brisk petrol automatic that was spacious and with good audio, nice heated seats and parking sensors.

A Volvo? Older petrol Volvos are rarer than Paganis. There are a few TFSI-engined Volkswagen Group cars around, but I once owned a youngish Skoda Octavia Scout with the requisite FSH, and it not only consumed oil but also managed to slip its timing chain. Final-gen Honda Accord 2.4 estates are fine cars but also hard to find.

Cranking up the budget to five figures-plus hardly helped. Anything 3 Series-sized and above was diesel, and with an expanded Ultra Low Emission Zone looming across Greater London, I needed a Euro 6 diesel, which sent us north of £16k.

As to luxury extras, why are German makers so mean with their speccing of heated seats? Trying to find a petrol 3 Series Touring xDrive with extendable, heated seats was nearly impossible. A 3 Series GT? Nice idea but the same issue, and that 320i petrol turbo engine is hardly a ball of fire. Most everything else I spotted during my search was diesel.

> "Anything 3 Series-sized and above was diesel"

I stumbled over a nice Volvo V90 T6 AWD, but the 15mpg in town was too much to contemplate. Then I really fancied a Subaru Forester XT, but I couldn't get on with the seating position. Short seat squabs; very frustrating.

I had been eyeing Lexus for a while. The NX300h hybrids – a good halfway house in size – were still expensive. The RX450h was in useful supply but it's a giant with a V6 engine and Group 40 insurance. I tried one at Lexus Poole. Beautiful car, specced to heaven and back, but a 2.2-tonne whale. My partner loved it.

Then I saw a 2009 RX at Lexus Leeds in full-on SE-L Premier spec. Full Lexus history and Lexus warranty. Okay, £14.5k is strong for a 10-year-old car, but it's a Lexus. It's big and doesn't care to be rushed (unless it's going in a straight line), but it often runs on electric in town, it's immensely hushed and the level of detachment from the world is quite addictive. The boot is huge, the seats heated and cooled and it even has a head-up display. Most importantly, I don't have to worry about AdBlue, DPFs and dual-clutch gearboxes. In the end, all-round peace swung the deal towards a car I'd never imagined buying.
HILTON HOLLOWAY

VOLKSWAGEN BORA

This 2004 Volkswagen Bora arrived home to respectful coos from my neighbours, who had never seen anything with electric windows on my driveway before. For a while I enjoyed the novelty of having heated leather seats and cruise control in my £1300 station shuttle, but soon its affordability started to make sense: the Bora was hiding a dark secret behind its pristine rear alloys.

One day, while parked on a side street, it liberated itself of its oppressive handbrake mechanism and made a bid for freedom... straight into the back of the car parked in front. After blocking a busy B-road and being towed to a recovery yard far away, the Bora then added insult to injury by being perfectly driveable and costing me £200 to reclaim.

Bargain motors? Keep an eye on them. **FELIX PAGE**

HONDA CIVIC

What do you do when you have a 15-year-old Mini and a growing family which is no longer, well, mini? Well, first you sell the Mini, which turned out to be a remarkably easy thing to do: the allure of a desirably branded car at £2000 came as quite a shock.

Budget then doubled to steer our choices away from the edgier end of the market. In the name of safety and reliability, wilder considerations included Subaru Foresters and Audi A2s. But the left side of the brain won, meaning a 10(ish)-year-old Toyota Auris or Honda Civic. As you can see, the latter triumphed. It may not have the brand allure of the Mini (if I could have found one in Si spec I'd have partially ticked that box, though), but this £3200, 50,000-miler – in rare 1.4-petrol tune, no less – is proving to be something of a revelation. **JIM HOLDER**

MERCEDES-BENZ A-CLASS

Twenty years ago, when my first child was born, I bought a Mercedes-Benz A140 from Benz, the actual car Autocar had road tested in 1998, no less. Ten years ago we needed something bigger and, as ours was the oldest A-Class in the country, Mercedes-Benz bought it back and restored it to show condition. Ten weeks ago I heard it was needed no more. Well, I couldn't let it go, could I? So now I own both the oldest and, I am confident, best original A-Class in the land. Not saying much? Maybe not, but these cars are works of engineering genius, a packaging miracle which still has lessons to teach the car makers of today.
ANDREW FRANKEL

MAZDA MX-5

I bought my MX-5 last February. It was an ex-dealer demo with just 500 miles under its belt, saving me £4000 on the new price. I was hoping to get close to the same thrills I experience on my motorcycle, and I haven't been disappointed. Some memorable drives stand out. First was an early spring blast to Duxford (what is it about lowering the roof that makes a convertible seem even faster and more agile?). Second was a late-spring drive into Worcestershire for this magazine, hunting down small car businesses, and third was a run to Goodwood for the Revival in the late summer sun. Bliss. **JOHN EVANS**

INNOCENTI MINI

The Mini 90 and 120, styled by Bertone and introduced in 1974, were the first official hatchback-based Minis, and they preceded the Metro by six years. They were among the first superminis.

Underneath was standard Mini A-Series running gear (998cc and 49bhp in the 90, a 65bhp 1275cc in the 120), yet it was only marginally larger than the old car, being just 2.6in longer and 3.5in wider. Leyland Innocenti went bust in 1975 and De Tomaso took a controlling interest in 1976. In 1982 its Mini 3 had Daihatsu power and the British connection ended.

> It was bouncy and noisy and things needed doing, but mostly it worked

Innocenti beat the Metro to market as a hatchback supermini

will be January, but I'd wear thermals. Lots of thermals.

Then the owner admitted that the tyres weren't all that, so best not to drive it back. I asked if there was a nearby tyre fitter. He was evasive (later I discovered I would have probably died in the Alps due to the dodgy brakes and ancient rubber).

On a wet Friday at the end of January, Ryanair took myself and Mrs Ruppert (she's my designated minder) to the northern Italian city of Bologna. We checked into Il Canale hotel, which was as quirky and attention-seeking as the Innocenti Mini. The place was packed full of absolutely fantastic tat, like a carefully controlled explosion in a hipster shop: an old push bike, stuffed animals and loads of empty but colourful biscuit tins .

The next day we went to a bleak, industrial part of the city, with car dealers, random commercial units and what turned out to be a smallish underground garage in which the Innocenti resided.

The car was driven out into the daylight and it seemed straight enough. It certainly started without much bother, although a blowing exhaust made it sound a teeny bit rough. At some point it had been indifferently resprayed, but it was still on a par with how most Leyland products left the booth in the 1970s. There were no major dents, just some less-than-brilliant panel gaps, but again, it was all very '70s. Under the bonnet it was stupendously clean, though, and the togetherness of the upholstery was quite a shock.

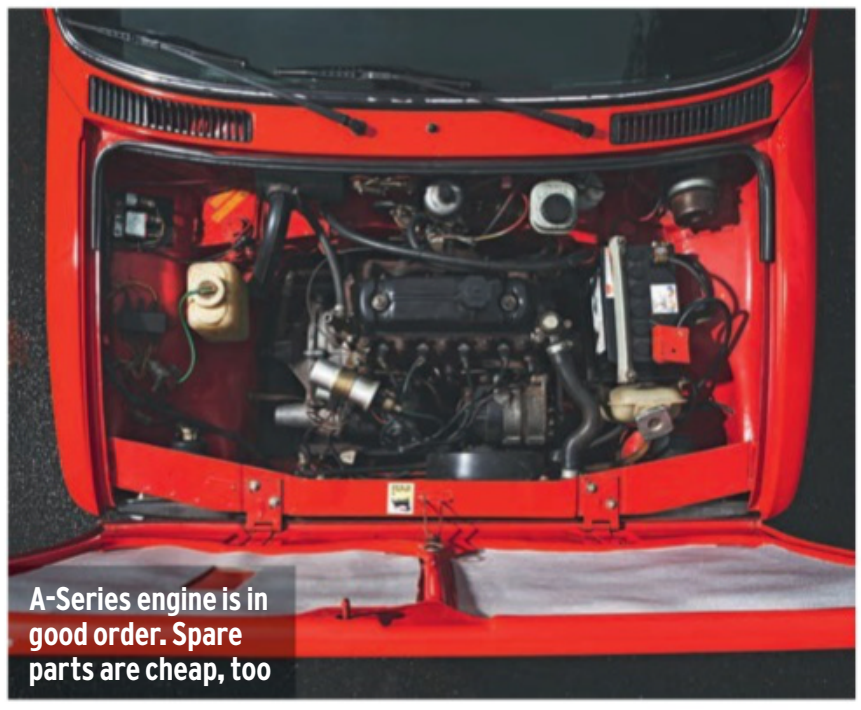
It was too damp to get right underneath the car. The sills seemed a bit crumbly and there was a colossal amount of black underseal of a certain vintage. Some work would be needed, not least on the basis that it's from the '70s and I have never seen any car, let alone a Mini, without some degree of ruggine or other. We drove down the road and around the industrial estate. It was bouncy and noisy and I reckoned it needed things doing. Mostly, though, it worked. The hard-to-get parts and bodywork all seemed intact, and the oily bits are all easily obtainable A-Series components and as cheap as chips.

This Innocenti would make one hell of a 60th birthday present, so I bought it. But was I going to drive it home? Er, no. I booked a trailer. A

The oh-so 1970s upholstery is in tip-top condition

Hatchback boot makes it decidedly practical, too

Dials are simple enough but have a hint of design flair



A-Series engine is in good order. Spare parts are cheap, too

Lights need stick-on anti-blindness encouragement

Some of the panel gaps are dodgy; this one looks fine

JAGUAR LAND ROVER

The long-awaited new Land Rover Defender was launched this year. You may have heard already. It was, after all, one of the biggest reveals of 2019 – and the biggest from JLR for several years.

With the firm set on reinventing the Defender for the modern era, we predicted that "the new Land Rover Defender's design will make Brexit debates seem mild". That was true (up to a point): everyone seems to have an opinion on it, from those who think it's a glorious reinvention to others who insist it's an unworthy pastiche.

We also suggested the Defender might break our website from sheer number of readers: thankfully, autocar.co.uk stayed functioning on the big day (thanks, tech team), although you did try: the Defender was the most-read-about car of 2019.

We also tipped a comeback for Jaguar Land Rover, reasoning it had a "series of enticing, rule-changing cars to launch this year and next". Given JLR's ongoing financial struggles, including having to massively write down its assets, it's a bit of a stretch to say the comeback is on, but there are signs of recovery. It is investing in new models, and the likes of the bold new electric-only Jaguar XJ show there are some exciting innovations, too.

New Defender, a long time coming, divided opinion

DON'T LOOK BACK IN ANGER

In January, we guessed what would happen in 2019. **James Attwood** takes stock

Back in January, we took the foolhardy step of predicting what would happen in the car industry in 2019.

We tried to forecast the key events and trends that would shape the motoring world, covering topics as diverse as the new Land Rover Defender's styling, Lewis Hamilton's Formula 1 title chances and – inevitably – Brexit.

With the year winding down, it's time to look back and see whether our predictions were on the (crystal) ball.

We'll be making our 2020 predictions in our 8 January issue. If you want to suggest your own, email james.attwood@haymarket.com

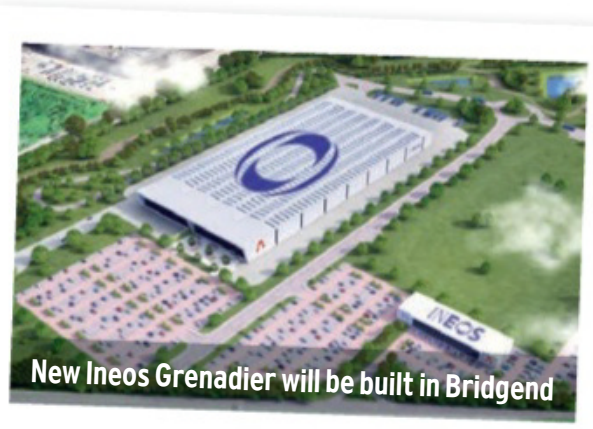
THE UK INDUSTRY

"Will 2019 be the year that a major car plant shuts in the UK?" There's no prediction about which we would rather have been wrong, but Honda announced plans to close its Swindon factory, while Ford is shutting its Bridgend engine facility.

The future of Nissan's Sunderland plant remains the subject of much speculation, but while the firm moved production of the next X-Trail to Japan, it is making the new Juke here and investing £100 million in upgrades. Brexit continues to cloud the long-term picture – as it does for Vauxhall's Ellesmere Port site.

One of our correct predictions was better news for Bridgend: Ineos will assemble its new Defender-inspired Grenadier off-roader in the south Wales town.

More broadly, we predicted an upsurge in car firms partnering up on future tech. And whether it was Mercedes and BMW, BMW and Jaguar Land Rover, Volkswagen and Ford, or Toyota and just about every other Japanese firm, that certainly proved true.



New Ineos Grenadier will be built in Bridgend

Honda is to shut its Civic-making Swindon factory

SALES PREDICTIONS

EV launches covered all bases, from e-208...

...to the highly impressive Porsche Taycan

Given we knew in January that the Kia e-Niro, Volkswagen ID 3, Porsche Taycan, Peugeot e-208 and more would be launched during the year, it wasn't much of a leap for us to proclaim that "2019 will be an electric year".

Even so, the extent of the electric car market's growth has been impressive: sales more than doubled in the UK year on year, and the quality of the new machines that are being launched is hugely impressive.

Conversely, we correctly predicted that 2019 would be a tough year for plug-in hybrids, with UK sales collapsing by nearly 30% following the withdrawal of incentivising government grants.

While we were pessimistic about plug-ins, we held out optimism for a diesel revival, predicting a sales lift "once the penny drops that, under new emissions regulations, the latest diesels produce cleaner real-world exhaust emissions than older petrol cars".

Not so much: in the UK, diesel sales slumped more than 20% this year. We'll keep on making a case for diesel as a sensible powertrain choice in the right circumstances, but it seems the court of public opinion may have already decided.

Kia e-Niro typifies the new breed of desirable EVs

MOTORSPORT

It wasn't much of a stretch to predict Lewis Hamilton would win a sixth world championship title, although the ease with which the Mercedes man secured the crown still impressed.

We tipped Max Verstappen to be his closest challenger, and while Red Bull couldn't mount a consistent title bid, the Dutchman did take a number of thrilling wins. We also suggested that Ferrari new boy Charles Leclerc would pose a threat to team-mate Sebastian Vettel – but we didn't expect the Monaco driver to upstage the four-time champion quite so comprehensively.

Away from F1, we tipped the Volkswagen ID R to break another record. In fact it set three, with Romain Dumas smashing the electric Nürburgring record, conquering Tianmen Shan mountain in China and breaking the outright Goodwood hillclimb record.

Our suggestion that Kris Meeke would fight for the World Rally Championship title didn't look quite so smart – although his Toyota team-mate Ott Tänak did win the title.

But perhaps our worst prediction of the year was that Fernando Alonso would win the Indianapolis 500 for McLaren. He, erm, failed to qualify.

VW's ID R set EV records around the world

Alonso didn't even qualify for the Indy 500

Formula 1 went as predicted, but there was drama on the way

OTHER PREDICTIONS

Dyson

What we said "James Dyson will spark a revolution."
What happened Patent suggested Dyson's long-planned car certainly could prove radical... until the project was suddenly – and sadly – canned in October.

Tesla

What we said "Tesla will be bought."
What happened Plenty of Tesla Model 3s were bought, but the company continues on independently – and increasingly successfully.

TVR

What we said "I'll be amazed if a TVR customer takes delivery in 2019."
What happened Correct: work on the firm's factory was heavily delayed.

Vauxhall

We said "Vauxhall will continue to bounce back."
What happened Still early days, but the new Corsa has attracted more admiring glances than anything the firm has produced in years.

Brexit

What we said "Trying to predict Brexit is an impossible task."
What happened Trying to predict Brexit was an impossible task.

THE WICKER PLAN

From figgy pudding to Gentleman's Relish, piccalilli and bizarre preserves, Christmas hampers can be a minefield of culinary disappointment. So we decided to build our own by way of a national road trip in an everyday all-rounder. **Richard Webber** procures a 520d Touring and hits the road

PHOTOGRAPHY MAX EDLESTON

Under way in Edinburgh and the 520d's noisy run-flats make their presence known

Taking reprieve from a festive fug of fortified wines and gin, it was the Victorian ruling class that struck upon the idea of a Christmas hamper: an annual gift of seasonal goodies for its servants. Things are a little less formal in the Autocar office these days, but master of the house Tisshaw has nonetheless tasked me with sourcing a cache of yuletide treats for the team this year.

Hamper champs Fortnum & Mason charge up to £6000 for filled baskets, but we reckon we can build our own for considerably less than that, even accounting for the overheads of a nation-wide road trip. And so it is that photographer Max Edleston and I set off from Edinburgh driving an everyday hero that ticks all of our mission's boxes: a BMW 520d xDrive Touring. In its generous boot sits an empty hamper, ready to fill with the finest local produce we can find.

There's a bassy rumble from the 19in run-flats as we skip over the West End's cobbles, but having slacked off the adaptive dampers (a worthwhile £985 option), we first sample the car's talent for comfort, which soon extends to a northward motorway blast into Perthshire. The tyres pipe down and the punchy 187bhp engine settles at 1600rpm in top, the 5 Series channelling the spirit of the 7 Series limo with which it shares many innards.

Our first stop is the Innis & Gunn brewery on the edge of Perth. Inside the high-roofed industrial unit and among huge, gleaming, 30,000-litre tanks, office co-ordinator Neil Everett shows us one of the company's defining secrets – an 'oakerator' that percolates the beer through wood chips made from ex-spirit barrels. A few days of this transforms a red beer into 'Blood Red Sky' with the help of rum-soaked chips, while 'The Original' uses toasted bourbon casks to make a sweet, rich, buttery ale. Everett recommends 'Vanishing Point', an 11% ABV stout mellowed in bourbon casks for 12 months, as a Christmas alternative to port, so we grab a couple of bottles among others including the Inveralmond real ales also brewed here.

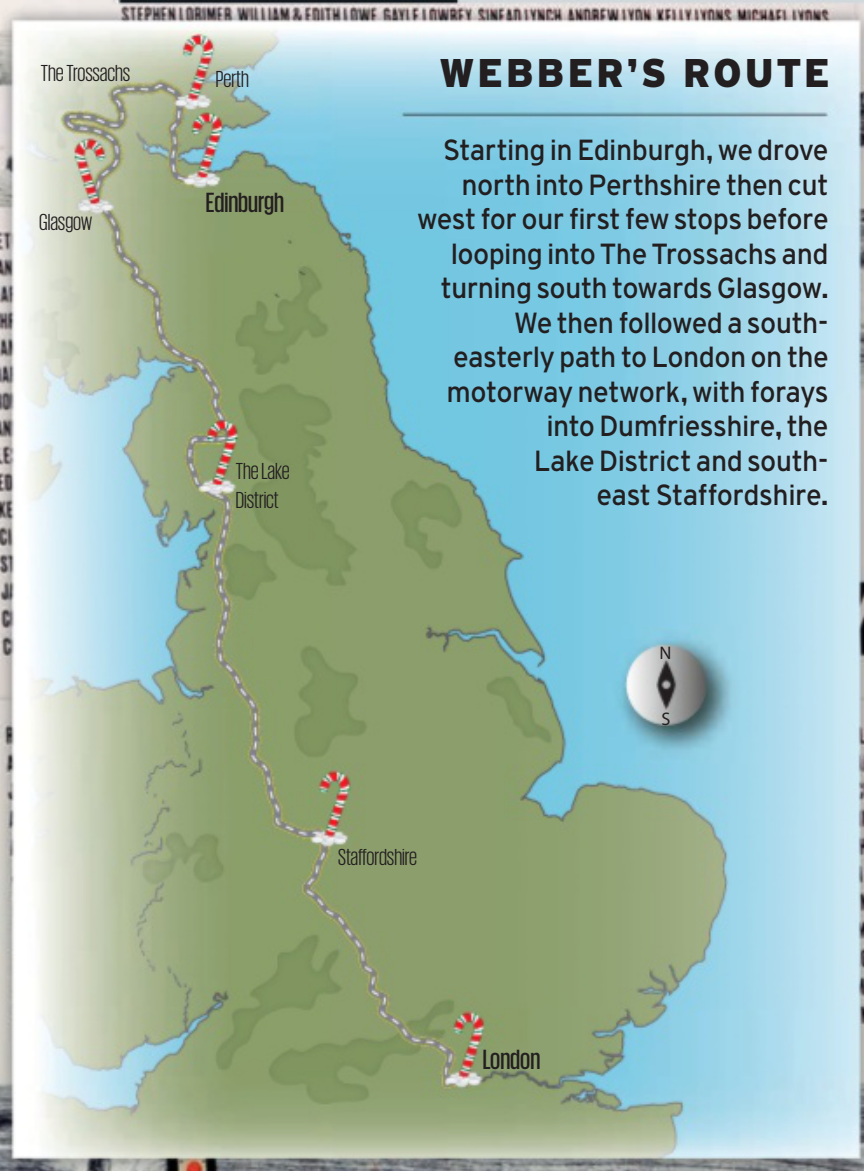
Innis & Gunn's beers are infused with wood chips made from casks used to store spirits

With the hamper clanking, we break west in search of an even stronger poison. The back road to Crieff is well-surfaced and open enough to merit the BMW's Sport mode, toggling the damping, steering, transmission and engine into their most aggressive settings. That's a relative term, of course, because while our car carries M Sport spec, comfort is never abandoned. Still, we're able to carve enjoyable lines and carry ample pace beneath the autumnal canopies, red squirrels diving from our path.

Just past Crieff we park alongside the rushing River Turret, where a cluster of ancient, postcard-ready white buildings wear the pagoda tops that mark out Glenturret as a whisky distillery. Officially they first made the national spirit here in 1775, although illegal production began in 1717, arguably making it Scotland's oldest distillery.

Traditional methods prevail: general manager John Laurie shows us the 6000-litre Douglas fir washbacks where yeast ferments the warm, malted barley solution into booze. Carbon dioxide oozes from it, and a large bubble pops just as my colleague hangs his head in for a peak, almost flooring him. A worker named Grace Gow perished that way in 1870 and today a single cask whisky is named for her, but thankfully the 'Edleston 22-year-old' remains unbottled for now.

We see the chubby copper stills



that help produce a smooth, light whisky, and meet the mouse-hunting Glenturret cats that bask in their warmth. Then we learn about the bourbon barrels and sherry casks of American and European oak that, in time, lend flavour and colour to the spirit. All are used to create the sweet and fruity 'Triple Wood' single malt, so that's the bottle we leave with.

Another short westbound hop comprises generously wide A-road, along which the 5 Series bounds effortlessly below the seasonal tan, titian and tangerine of Perthshire's rolling hills as the eight-speed auto 'box melts between gears.

We turn onto the River Earn floodplain at Comrie and soon find Cultybraggan – a vast WWII POW →

Glenturret has been a distillery since 1717, albeit illegally at first; John Laurie (above, on left) warns Webber of the potential dangers

DARREN JONES

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73 AA	34 DER	205 HAN	40 KB	MJT 790	RAJ 96	57 T	97 CB	45 KR	37 PY	30 TA
AB 111	DFB 6	4 HER	7 KH	MPS 7	RCH 18	TES 5S	68 CT	KS 17	15 PU	64 TD
5 AJC	7 DRW	HH 2	KH 3	MRT 1M	RBW 3	TK 25	CK 20	26 LD	32 RB	77 TK
69 AB	30 DKY	46 HLT	K2 HAN	S1 MTH	44 REG	898 TR	67 DC	11 LE	68 RD	88 TK
AHM 1D	D1 SHY	CAR 16K	K1 RRK	A1 MTV	RIA 58	1 UA	33 DL	58 LN	92 RD	15 TM
AJ 66	DT 6	GO 92	KS 17	44 NDY	RJH 34	36 V	85 DO	47 LW	34 RE	TP 28
AK 7	E 33	LEK 9	KS 5	77 N	RK 83	88 X	47 DM	92 LW	RG 65	88 TS
V8 AML	10 EMS	3333 J	8 LB	S57 NGH	5 RKB	10 XE	38 DW	MC 64	RG 67	65 TU
111 OOO	EG 6	88 JA	LEM 4	NT 2	RL 25	6 XK	DW 50	24 ME	RG 69	61 TH
B 22	E635 AMG	JAK 8E	LJ 3	570 NY	8 RLA	20 Y	73 DS	53 MF	96 RM	73 TL
3 BET	JA59 UAR	JES 164A	11 LJS	OI 3	RO 13	2x2'S	52 EA	73 MK	59 RS	TK 25
B 73	3 FDM	5 JHL	P11 LLL	OR 6	9 RSC	38 AS	84 GT	29 NL	93 RW	57 UD
BBC 5	JN11 FER	9 JMM	39 LYN	50 OT	59 RS	BD 24	84 GS	84 NT	12 RV	49 WB
BIL 394	2 FMW	14 JO	LYR 11K	GG12 OVE	5 RY	56 BJ	73 GN	16 OJ	29 RV	WC 45
8 CAW	91 G	JOS 11	7 MB	17 PB	2 S	71 BN	56 HM	11 OU	60 RY	70 WN
CB 26	5 GDY	JOS 16E	12 MCJ	3 PMW	6 S	76 BN	31 JH	80 OL	38 SA	41 WR
CC 373	4 GJS	JOY 1S	MEL 355A	93 PPP	SBG 3	17 BV	53 JB	53 PD	32 SM	22 WL
CHU 880Y	9 GKY	JRA 55	MAX 960	16 PR	SCT 71	30 BV	97 JM	76 PN	86 SN	15 XV
31 CJJ	HAJ 1G	88 K	MJB 5	8 PSA	0017 SPY	CB 46	34 JP	60 PS	39 SR	72 Y

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Former POW camp at Cultybraggan is now home to 31 businesses

> “Taking to the moorland south of the camp, the car gets a workout over the undulating B-road”

1700L
Maximum boot capacity is, in theory, big enough for 39 hampers such as ours – or £114,000-worth of Glenturret single malt.

←camp of 100 Nissen huts built to hold 4000 of the Wermacht's deadliest. It fostered its share of horrible wartime histories before becoming a training camp that hosted almost every Scottish army cadet for decades. I earned an exemption (pipe band duties, not bone spurs), and a peek inside a peeling, unrestored hut makes me glad.

The camp is now community-owned, reborn as both a tourist attraction and a home to 31 diverse small businesses – one of which is Strathearn Cheese, which uses local milk to make up to 200 cheeses daily from a tiny room in what was the camp guards' kitchen block.

Co-owner Drew Watson greets us while hand-turning truckles of 'Wee Comrie', a pleasantly mild, buttery cheese named for the nearby village. But his star product is 'The Strathearn' – a rinded cheese repeatedly washed in whisky from our friends at Glenturret while maturing for a month. It won gold at the World Cheese Awards shortly after production began in 2016.

A sniff of the chilly maturing room's regulated atmosphere gives a preview of The Strathearn's 'robustness'. Then we try a sample, prompting Edleston's face to fold, while my tongue takes a conniption. It's addictively flavoursome and we buy some immediately. Watson throws in some oatcakes and we procure a complementary tomato chutney at nearby Hut 17.

Taking to the moorland south of the camp, we trace the River Knaick while birds of prey circle overhead. The car's Adaptive mode gets a workout over the undulating, twisting B-road, predictively adjusting the Drive Control settings to deliver swift, composed progress, then it's an easy, half-hour main-road amble to Callander, just south of the Highland Boundary.

The town is home to the Campbells Shortbread bakery – the oldest in Scotland – which has been run by seven generations of Campbells since 1830. We're tight for time so buy some from a shop on Main Street: a tin for the hamper and a pack for immediate sustenance, which charges us nicely for the final stint to an overnight stop near Glasgow.

We take the indirect route, skirting Lochs Venachar and Achray as the sun sets somewhere unknown among the cloud bomb above us.

It's dark by the time we reach the Duke's Pass, catching only glimpses of its heathy beauty as the optional adaptive LEDs squint into each bend. In Sport mode there's a muted growl as revs are kept usefully high to help punch out of corners, but the apices tighten and body roll escalates, so I ease off in favour of passenger comfort. It's the first time the car has felt its 1810kg kerb weight. Civilisation is soon re-joined at Stirling,→

Streathern Cheese has made its home – and a name for itself – at Cultybraggan

Campbells shortbread offers much-needed in-car energy boost

“We switchback onto the A701 to enjoy the sinuous stretch to the Devil’s Beef Tub”

OPTIONAL EXTRAS: BUILT-IN HAMPERS

ROLLS-ROYCE PICNIC HAMPER
From £30,000
For fine dining al fresco, this leather, teak and aluminium box includes Wedgwood porcelain plates, stainless steel cutlery and wine glasses made from hand-ground lead crystal.

MULLINER PICNIC HAMPER
From £22,000
Penned by luxury design house Linley, this customisable set of three Beluga hide-trimmed compartments contains a dining set, illuminated champagne cooler and cashmere rug, all securely docked in the Bentley Bentayga's boot.

MERCEDES-BENZ PICNIC HAMPER £83
Stuttgart's contribution is a steal in this company, its more rustic – not to mention more modestly priced – willow basket containing a full dining set for two, including tablecloth. A volkshamper, relatively speaking.

←then it's a hushed and painless 26-mile motorway tab to our overnight stop in Uddingston.

Day two is my Charlie Bucket day, for Uddingston is home to Tunnock's, the glorious maker of the sweet treats I've adored since I was a sugar-charged ankle-biter. In a towering brickwork factory on Old Mill Road, 600 staff are working around the clock to make 13 million Teacakes, Caramel Wafers, Caramel Logs, Snowballs and more every week.

Our guide is Tunnock family member Stuart Loudon – coincidentally an accomplished rally co-driver who has competed in 22 WRC events. We pass huge tanks of chocolate (20 tonnes are made daily), then see boilers turning out molten caramel that's cooled into thick cables that disappear tantalisingly through the floor.

Arcing conveyors slowly waft freshly baked wafer sheets that are dispatched to assembly stations where each is smothered in caramel before the next layer is hand-placed.

36.0mpg
Our final fuel economy calculation after 652 miles – some way short of the WLTP figure of 42.8mpg.

The enormous sandwich is then chopped into bars before entering an 'enrober', coating them in chocolate.

The whole place is a buzz of machines and stripy-coated workers, with sweet aromas ranging from roasting coconut to baking biscuit swirling all around. Some parts are top-secret – such as the custom-made contraption that de-peaks the blobs of mallow – but we can photograph others.

Many are electronically controlled, but the machine that individually wraps 420 Caramel Wafers in foiled paper each minute works via a blur of gnashing, manually adjustable metal cams. Another sensor-driven station uses robotic carbonfibre arms tipped with super-soft vacuum cups to neatly place each Teacake into a pack of 12. It's both mesmerising and mouth-watering, and we leave with a generous haul of goodies in tow.

The M74 provides an express conduit to our next stop at Moffat, but before reaching town we switchback onto the A701 to enjoy the sinuous stretch leading to the dramatic natural hollow of the →

Confectioners Tunnock's prefers a less anonymous form of delivery vehicle

Tunnock's makes 13 million of its treats every single week; Caramel Wafers and Teacakes in particular are national institutions

← Devil's Beef Tub. It's damp, but the xDrive system staves off understeer to make for confident fast cornering. A truly engaging drive would need a bit more keenness from the engine, gearbox and steering but in the context of this trip, I'll take those slight concessions. Presumably the Police Scotland 5-Series Touring training vehicle we encounter was chosen for similar reasons.

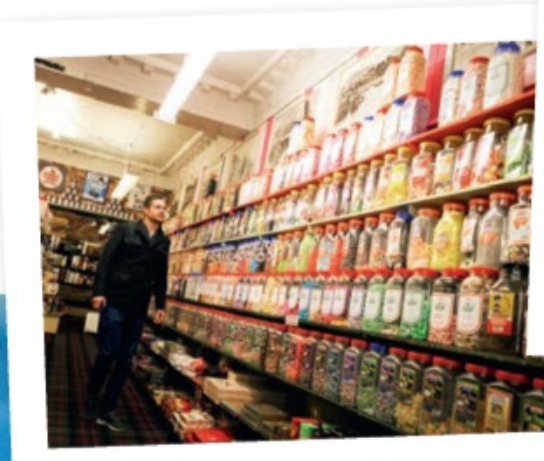
In town we collect some Moffat Toffee from the eponymous shop. These boiled, pearlescent golden lozenges sold in distinctive houndstooth packaging have been made by the Blacklock family since the late 1800s using a secret ingredient that gives an unusual, tangy flavour. It's really not like toffee at all but it is delicious. It's a struggle to tear ourselves away from the rows of traditional confectionery jars, but as is becoming routine, we open the Touring's indispensable tailgate window and the load cover electrically retracts so we can pop our swag straight into the hamper.

We soon cross into England then veer off to become enveloped by the brooding, sun-streaked peaks of the Lake District. Opting for another back-road diversion, we take the B5322 through St John's in the Vale. It's a landscape straight from Postman Pat, all twee farmhouses and dry-stone walls that dice the lush hillocks into tiny fields.

Upon reaching Grasmere, we weave through slate-stone buildings to pull up outside the little whitewashed Church Cottage on the edge of St Oswald's Churchyard – resting place not only of William Wordsworth but also Sarah Nelson, who started selling her distinctive Grasmere Gingerbread from the cottage in 1854. The spiced slices – at once chewy and crumbly – are still baked here and sold from behind a minuscule counter, the queue to which regularly spills out of the door and on to the pavement.

Attired in shop-regulation Victorian garb, Abbey Davison hands us a tin of gingerbread, thoughtfully tied in Autocar-branded ribbon, and a jar of Cumberland Rum Butter – a boozy local spread that's ideal with mince pies. I can't sample that but the gingerbread must be eaten fresh, so I oblige as we drive on: messy but worth it.

Webber is spoiled for choice but the Moffat Toffee is the one to go for



> “It's late, it's cold and I'm glad of the heated steering wheel as we press on to Kendal”

Grasmere Gingerbread has a 165-year history; Autocar magazine isn't that far behind

Buzzard Valley's Pete Viggers talks grape growing

All ready for the ingrates at the office

In the gloaming we pass pretty Rydal Water, the scene fringed by autumn leaves – beside the lake, beneath the trees, fluttering and dancing in the breeze – then Edleston artfully captures the last of the light on the slipway at Royal Windermere Yacht Club. It's late, it's cold and I'm glad of the heated steering wheel (£185 well spent in theses climes) as we press on to Kendal where we grab a slab of Romney's Mint Cake during our first fuel stop before eventually bedding down outside Preston.

Our closing day is a motorway slog to the office in London, but we bisect the trudge with a final stop at the bucolic haven of Buzzard's Valley Vineyard near Tamworth. Co-owner Pete Viggers leads us through the 8000 vines of red and white grapes that wine-maker Leon Jones uses to turn out up to 18,000 bottles annually. The soil here is good for grape-growing, and all are hybrid varieties developed to cope with the English climate – they even produce a sparkling wine using the Champagne method, and have diversified into gin, too.

We buy a selection, including the 2017 Sly Fox – an award-winning red that apparently goes perfectly with strong cheese. We've had to confine The Strathearn to Tupperware in favour of retaining long-term nose function, but that pairing should work beautifully.

All that remains is the final schlepp to the office, which the 5 Series ruthlessly gobbles up to complete a 652-mile total. What an excellent companion it's been: practical yet luxurious, comfortable yet game. And what a hamper we deliver, groaning under the weight of indulgences within. It'll never last until Christmas. A

Rudolph, you're fired

No vehicle is more important at this time of year than Father Christmas's transport. **Ben Summerell-Youde** and **Rachel Burgess** imagine a next-gen sleigh incorporating the best (and worst) of what the car world has to offer

There's not a premium vehicle in sight which doesn't offer puddle lights as a costly option. These ones are a snip at £5000 and reflect Santa's more traditional powertrain choice.

GRILLE
If you want to compete with the German premium brands, an enormous, slightly gauche grille is a must-have. Santa's grille features a digital display, allowing the sleigh to communicate with other vehicles – flying cars, autonomous drone taxis, perhaps – to warn of danger or traffic jams. Although we can't imagine the latter would be much of an issue for Mr Claus.

HEADLIGHTS
The snowflake headlights use the latest digital matrix technology, recently revealed on Audi's E-tron Sportback. The lights feature 1.3 million micromirrors that can be tilted up to 5000 times per second. Their party trick is that they're capable of projecting films, but, more importantly for Santa's busy night, the headlights project a 'light carpet' to keep one on course.

DETACHABLE SCOOTER
The buzz phrase of present drop-offs is 'last-mile delivery', promising faster arrivals and better efficiency. Santa can avoid the aerial congestion caused by the next generation of airborne urban vehicles by parking his sleigh on a roof and using his electric scooter to shuttle between chimneys. The folding scooter stows under the sleigh's boot floor, like Skoda's recent scooter concept.

TYRES
Forward-thinking Santa has adopted spherical tyres for his new sleigh, modelled on Goodyear's Eagle 360 concept rubber. Each tyre is suspended by magnetic fields – using similar technology to Maglev trains – meaning better comfort and reduced noise for the busiest night of the year. The tyres allow the sleigh to move in all directions, making it much easier to park on the rooftops of London.

FOLD UP WINGS
Foldable wings make Santa's transport the most practical yet and not dissimilar to the new generation of flying cars, such as the Terrafugia. The sleigh can travel at up to 575mph with its wings extended, or they can fold to navigate the narrowest of speed-reducing bollards. Plus, it means the sleigh can comfortably fit into Santa's four-car garage back at the North Pole.

DYSON FAN BOOSTERS
There's now no sign of Dyson entering the automotive world after the axe of its EV project, but the firm's other products could provide our concept with a tech boost. This sleigh uses Dyson's popular fan for a boost function, helping to create a stream of smooth, high-velocity air to propel Santa through the skies and tick off the final few countries before Christmas morning arrives.

BAC CARBON TECHNOLOGY
Santa's sleigh is already made from carbonfibre, but our cutting-edge concept incorporates a version of the material that contains graphene. The process, which has been developed by BAC for its Mono R, results in a lighter, cheaper material which is more durable and offers improved thermal properties – all of which sounds like it's perfectly suited to Santa's sleigh.

McLAREN CENTRAL SEAT
Car enthusiast Santa wanted a central seat similar to the McLaren F1, promising great visibility through the skies, a good driving position and even weight distribution. Given his lengthy journeys, the seat must also be comfortable, which means a 12-way massage function, a cooling and heating system and, only accessible to Santa, an ejector seat button, just in case...

Baby Driver, Le Mans, Cannonball Run, School For Scoundrels. Big names in all, but the real stars are the cars

Our favourite

Looking for a dose of automotive movie action instead of the usual Yuletide flicks this

GRAND PRIX (1966)

Directed by John Frankenheimer

Starring James Garner, Eva Marie Saint, Yves Montand

Grand Prix is just as well filmed as Steve McQueen's Le Mans but comes with the sizeable benefit of actually having a plot. But my interest here is personal, because I once spent a day with its star, the late James Garner. He was so good he not only did all his own driving but also doubled for other actors who were too scared to get behind the wheel. And when he bails out of his burning 'Yamura' at Brands Hatch, that really is Garner you're seeing. Far more importantly, he was also not only an incurable petrolhead but one of the nicest men I've ever met.

ANDREW FRANKEL

SCHOOL FOR SCOUNDRELS (1960)

Directed by Robert Hamer

Starring Ian Carmichael, Terry-Thomas, Alastair Sim

For a start, that wonderful celluloid cad and bounder Terry-Thomas is in it – and not only that, he's also driving a Benelli. Well, actually an Aston Martin DB3S, but here's your first clue that this is no ordinary film, which uses four-wheeled plot devices. Hero Ian Carmichael is conned by Peter Jones and Dennis Price into buying the preposterous Swiftmobile, which underneath the serpent and elephant bonnet ornament is actually a 4.5-litre Bentley. It all comes good in the end as Carmichael part-exchanges it for a Healey 3000 and £100.

JAMES RUPPERT

CARS (2006)

Directed by John Lasseter and Joe Ranft

Starring Owen Wilson, Bonnie Hunt, Paul Newman

Yes, it's a computer-animated kids film about a world populated by anthropomorphic cars. But beyond the talking cartoon jalopies and Nascar racers, Cars celebrates the joy and romance of open-road motoring like few other films.

The characters' personalities encapsulate the spirit of the (surprisingly accurate) cars they represent, while the plot – racer Lightning McQueen gets stuck in the sleepy town of Radiator Springs – is really a touching lament to a golden age of motoring ended by the rise of highways. Plus it helped to make petrolheads of a generation of kids growing up in a world hostile to cars.

Sadly, follow-up Cars 2 was turgid, although I will forever love Cars 3 for containing a Jocko Flocko reference.

JAMES ATTWOOD

THE CANNONBALL RUN (1981)

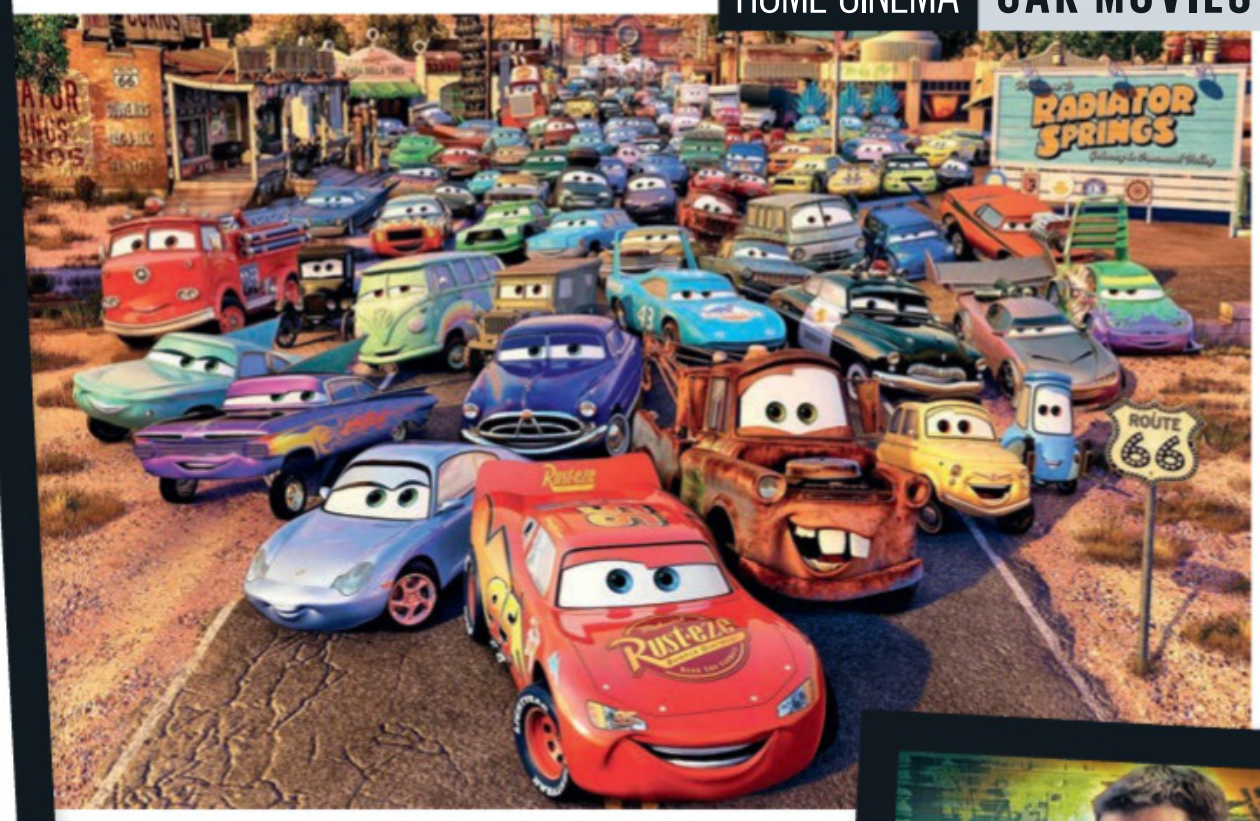
Directed by Hal Needham

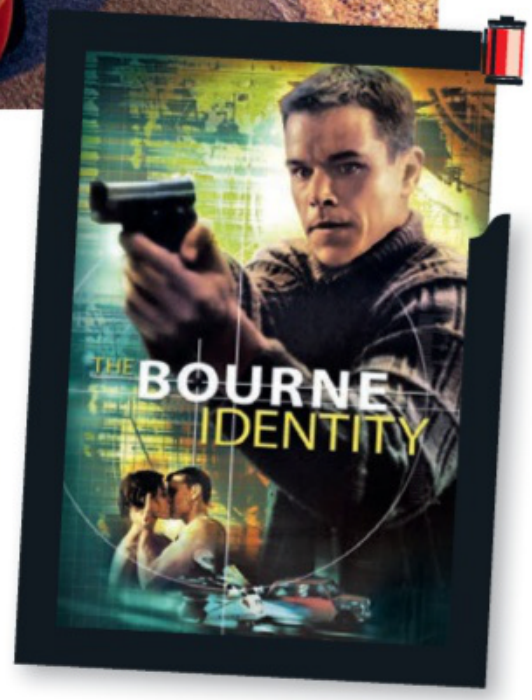
Starring Burt Reynolds, Roger Moore, Farrah Fawcett

There's no point pretending car chase films are high art; they're all about entertainment. And you can't get more entertaining than the hammed-up megastar-fest that was The Cannonball Run.

The cast read like a Hollywood who's who: Roger Moore, Farrah Fawcett, Peter Fonda and – most importantly – the god-like Burt Reynolds. All they did was have a daft race across the US, but it was hilarious: the cars were brilliant and the character cameos likewise. Jackie Chan drove a rocket-powered Subaru GL. Dean Martin and Sammy Davis Jr dressed up as Catholic priests, for heaven's sake. What's not to like?

I haven't seen it for years, but as a teenager my best mate had a copy on VHS that we wore out over a couple of otherwise uneventful summers. And I





Grand Prix, Cars, Duel, Bourne Identity: all big hits, but the cartoon motors delivered the most poignant message

car movies

Christmas? Take our advice and dig out these films that feature cars in leading roles

will remember the title sequence, with the white Lamborghini Countach on the run from the patrol car that gets 'resprayed' red, for as long as I live.
MATT SAUNDERS

BABY DRIVER (2017)
Directed by Edgar Wright
Starring Ansel Elgort, John Hamm, Jamie Foxx
The exhilarating blend of epic driving scenes and hip soundtrack makes Baby Driver my winner. Main character Baby is a music lover coerced into working as a getaway driver for a crime kingpin. Cue the six-minute opening scene, with Baby pulling in to pick up his partners in a Subaru Impreza then driving like a (skilled) maniac to evade the police. It sets the tone for an outstanding driving movie scored by tunes such as Harlem Shuffle and Know How. If only we could all be as cool as Baby.
RACHEL BURGESS

THE BOURNE IDENTITY (2002)
Directed by Doug Liman
Starring Matt Damon, Chris Cooper, Brian Cox
A drive from Zurich to Paris doesn't sound promising but when the car is a Mini, even 10mph looks like a high-speed chase. Things really kick off, though, when Bourne is pursued through Paris. It was a stroke of genius to lump him with a Mini, because we find ourselves rooting for the little car. Obsessives can enjoy the way the crew had to swap it (early on the steering wheel says 'Mini' but later on 'Cooper') while manoeuvring the same BMW 7 Series into multiple scenes. Add cameo appearances from a cast of 1990s European hatchbacks and this is a car movie to savour.
JOHN EVANS

DUEL (1971)
Directed by Steven Spielberg
Starring Dennis Weaver, Jacqueline Scott, Carey Loftin
A nail-biting horror – and no, that's not a description of the burbling Plymouth Valiant in which the great Dennis Weaver spends most of this movie sweating first in confusion, then in cold fear. Weaver plays salesman David Mann, who is cruising on a business trip through the Mojave desert when he inadvertently triggers road rage in the driver of a rust-riven tanker. Bad luck for our hero: the truck driver, who we never see, just happens to be a demented psychopath, who relentlessly pursues Mann's Plymouth to an inevitable conclusion. The second feature from a promising young director foreshadows the chilling tension and sheer terror he'd tap back into four years later in a slightly more successful movie starring a shark. But forget about not going back in the water – Duel is your worst nightmare.
DAMIEN SMITH

LE MANS (1971)
Directed by Lee H Katzin
Starring Steve McQueen, Siegfried Rauch, Elga Andersen
A lack of realism – affecting everything from the Fast & Furiouses to Rush – bothers me. Step forward, then, Le Mans, starring Steve McQueen and with action so authentic that the film crew had a camera car drive during the race itself, while an accident in filming cost David Piper his leg. McQueen was apparently an unpleasant man so is no hero of mine, but he was an intense on-screen presence to accompany what I think are the best car visuals – and sounds – ever put on the big screen.
MATT PRIOR

TRY THESE FOR SIZE

Tamiya is world renowned for its intricately detailed scale model kits and iconic radio-controlled cars. **Jesse Crosse** traces the brand's roots

PHOTOGRAPHY LUC LACEY

The R/C models are fun to play with but tricky to master

Porsche 934 kit spawned Tamiya's first-ever R/C car

Peeling back the wrapping paper on Christmas morning to reveal the famous twin-star Tamiya logo is a thrill that has set the hearts of millions racing. Tamiya was the first company to make radio-controlled models that were easy to assemble but a world away from being simplistic. For countless thousands it ignited an enduring love of cars and machines and sparked a worldwide cult following.

Since the 1960s, Tamiya has made its name through the quality of its static plastic and radio control (R/C) scale kits and, most of all, the ingenuity that goes into their design and the detail in them. The R/C cars and buggies that so many grew up with have intricate chassis and drivelines, with wishbone suspension, dampers, differentials and interchangeable gear ratios (a bit) like the real thing. Driving takes real skill: there's nothing quite like flinging an R/C buggy around a tight course to sharpen up the reflexes.

Two of the latest Tamiya R/C releases are the Mercedes-Benz G500 and the Toyota Supra. The G500 is based on a new CC-02 chassis – the 'CC' stands for 'cross-country' – with a ladder chassis construction rather than a simple tub, and the complex suspension and driveline gives the same kind of axle articulation as the full-blown Merc. That makes it ideal for rock-crawling competitions, as does the choice of 20 gear ratios for the single-speed gearbox.

The Supra is based on Tamiya's road-going TT02 chassis and was launched at the same time as the real thing. Such is the trust and respect companies have for the Tamiya brand, the model company was allowed access to Toyota's classified design and CAD information long before the Supra was revealed.

Both are a far cry from Tamiya's early days. Once a timber company, it started making crude wooden model kits after the war. Budding modellers could whittle them into shape with a freshly sharpened penknife, but it took plenty of determination to make a decent job of it. One such youngster was Shunsaku Tamiya, son of Tamiya founder Yoshio Tamiya.

In the 1960s, Tamiya's attention turned to the newfangled plastic kits and the company developed metal →

G-Wagen and Supra are faithful replicas of the real things

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Tamiya's Mini 4WD, only sold in Japan and Asia, was a flop in the '80s before becoming a huge craze. In 1997, 15% of all AA batteries sold in Japan were used in them. In total, 150 million were sold.

moulds to make them. Shunsaku Tamiya's passion for making models never left him and, unusually for a company boss, he takes a hands-on approach, preferring to measure, study and document new subjects personally. Initially, Tamiya sold exclusively to the Japanese and Asian markets, but that would soon change.

In the UK, David Binger of toy wholesalers Richard Kohnstamm Ltd (which many will remember as RIKO) was on the lookout for new products that European sellers didn't have. In 1966, he spotted some grey-import Tamiya kits while on a trip to the US and travelled to Japan to meet the young Shunsaku Tamiya and his father for the first time. That meeting marked the beginning of a long and successful relationship between the two firms and introduced Tamiya to the UK and Europe.

David's son, Pete, is now managing director of Hobby Company Ltd, the current importer of Tamiya products. Shunsaku Tamiya would later write to him: "David passionately encouraged us to sell Tamiya goods in the United Kingdom... I was a sceptic about the idea back then, but eventually David's courage and insight allowed our products to flow into the European market and led to establishing our brand worldwide."

Binger takes up the story: "My father established an entire European network and managed it. He quickly established that the growth of sales was linked to expansion of the range."

As the range grew, Tamiya plastic kits became renowned for quality and the almost excruciating detail with which they were modelled. Formula 1 was seen as a potentially big market, so Glynn Pearson, who worked with Binger senior, was dispatched to befriend all the F1 teams in the UK and gain licensing rights to model the cars. Some legendary model cars emerged, including the F1 Honda →

"Tamiya's boss measures and studies new subjects personally"

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BAII DOC	DOC BALL	BEII FRY	GOLF CLUB	BUII BEN	BEN BULL	BUII ROY	ROY BULL	FEII MEN	PERSONAL	ROII UPS	TOBACCO
BAII GUY	GUY BALL	BEII GUY	GUY BELL	BUII BOB	BOB BULL	BUII TED	TED BULL	HAII DOC	DOCTOR	SAII YES	SALLYS
BAII KEN	KEN BALL	BEII HOP	HOTEL	BUII DEB	DEB BULL	BUII ZOE	ZOE BULL	HAII GUY	GUY HALL	SEII BMW	BMW DEALER
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BAII MAX	MAX BALL	BEII LYN	LYN BELL	BUII KEN	KEN BULL	CAII GAY	PERSONAL OR INITIALS	HAII PAM	PAM HALL	TOII MEN	TO11 MEN
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BAII OTS	POLITICS	BEII NAT	NAT BELL	BUII LES	LES BULL	CAII KLM	AIRLINE OR INITIALS	HAII REX	REX HALL	VAII ORY	VALLORY
BAII PAM	PAM BALL	BEII PAM	PAM BELL	BUII LTD	COMPANY	CAII LOG	ANSWER SERVICE	HUIIBMW	DEALER	WAII LTD	COMPANY
BAII PAT	PAT BALL	BEII REX	BELL REX	BUII LYN	LYN BULL	CAII LTD	COMPANY	HUII LTD	COMPANY	WEII OUT	CRICKET
BAII RAY	RAY BALL	BEII ROD	ROD BELL	BUII MAX	MAX BULL	CAII RAC	RECOVERY OR INITIALS	HUII ROD	ROD HALL	WEII RAN	ATHLETE/HORSES
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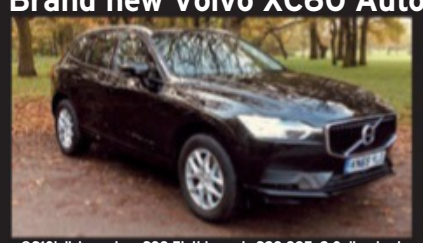

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Only 1,950 miles yes 1,950 automatic sat nav pepper pack park sensors one diplomat owner as new nearly half the price from new £10,995 hurry won't be round long.

Mercedes SL55 AMG Kompressor

2006/56 last of the hand built car. Total spec pan roof, extended leather, keyless, Tv, sat nav, heated cool comfort seats only 37k miles full MB Service history stunning collectible sought after car £24,995

Pete Binger's dad David established Tamiya's sales network in Europe

In the F1 Team Lotus days Pete Binger received a call from team manager Peter Warr asking if he could deliver some models to a hotel to keep a young driver amused. That youngster was one Ayrton Senna.

RA273, the Lotus 49 and the Lotus 72. "The Lotus 72 was a huge seller and put Tamiya on the map in the UK," says Binger.

Binger describes Shunsaku Tamiya as "the ultimate archivist" with an eye for perfection and detail. "Other people looked at the cost-effectiveness of a project; he just looked at creating perfection, and still does to this day. He was always one for gathering his own reference material and was never satisfied with being supplied photographs and information. He used to travel the world to study and photograph new subjects himself."

In the more rustic days of F1, engines were repaired instead of replaced, and the welded-up sump of one subject Tamiya used as a reference duly appeared on the finished model. Military tanks are a passion of Shunsaku Tamiya's. He once crawled into the tiny gap beneath a German Panzer to photograph the underbelly details at the US Army Ordnance Museum, and he once burned the midnight oil at the Bovington Tank Museum photographing every detail of a Tiger tank.

To make an accurate model of the Porsche 911, Tamiya bought a full-size car that was dismantled in-house to scrutinise every detail. Nobody at Tamiya had the expertise to reassemble it afterwards, so bemused technicians were called in from Porsche Japan to do the job.

Tamiya moved from static into radio-controlled models almost by chance. One lunchtime, Shunsaku Tamiya noticed one of his designers, Fumito Taki, driving an electric radio-controlled car around. He'd fitted a battery-electric drive to a Tamiya F1 car kit, and the result was just what the boss had been looking for. The company's first radio-controlled model had been a Sherman tank in 1974 and, inspired by Taki's efforts, the first car, a Porsche 934 in 1976. The scale body of the Porsche was based on a plastic kit that had received critical acclaim but not great commercial success. The Porsche was the first in the R/C world to have a scale body, but there was room for improvement. The body was too fragile for an R/C car and the dry non-rechargeable batteries limited in performance and life. That didn't stop the R/C version being a smash hit, though, and more robust one-piece bodies for R/C cars followed. Many of the purpose-built R/C cars that followed in the 1970s and 1980s went on to become icons which fired the enthusiasm of budding car nuts.

One such icon was the Sand Scorcher, a 1/10th replica of a Baja Bug that, says Binger, really set Tamiya on its way. It was the first real off-road R/C car with an accurate Baja-based chassis, sealed gearbox and oil-filled differential and one-piece ABS body. After being discontinued for a time, the icons were reintroduced, so now grown-up kids who were unable to afford them back then can fill their boots. A

A MODEL APPRENTICESHIP

Everybody starts somewhere and, in the case of legendary F1 designer Adrian Newey, it was a Tamiya Honda RA273 V12 F1 kit.

"My dad was a vet but maintained his own cars and was a keen hobbyist," he says. "When I was nine I built my first model, the Tamiya Honda F1 car, and my dad helped me. The second one was a Lotus 49 and that was probably a bigger influence. I found it incredibly useful because the parts were all labelled, like 'front upright' or 'upper wishbone', so I learned the terminology. As I built the models, I learned how F1 cars were assembled. The models have all the same components: engine, monocoque, gearbox and so on.

"Because the suspension and steering moves, it teaches you how the suspension articulates and how it all works. From the age of about 11, I started sketching my own designs and making them in Dad's workshop. I'd make cars out of folded-up bits of aluminium and laminated glassfibre, then cannibalised the Tamiya models for the bits I couldn't make, like the engine and wheels. I was learning as I went along and it's that age-old thing: to become expert in something, you need to spend at least 500 hours doing it – and, without realising it, that's what I was doing."

TAMIYA'S RADIO-CONTROLLED ICONS

SAND SCORCHER
Got the R/C ball rolling for Tamiya with an authentic 1/10th reproduction of the real thing. Funky yet technically intricate, even the swing-arm suspension echoes that of the original Volkswagen bug.

LUNCHBOX
Vans may not have been a thing in the UK in 1987 when the wacky Lunchbox was first launched, but it has been a hit ever since. Tinkering can include the fitting of constant volume adjustable – or CVA – dampers.

AVANTE
A bit more serious, this one. Not an entry-level kit, the Avante is designed for racing with a stiff aluminium and glassfibre construction. Suspension is adjustable for toe and camber and it has oil-filled adjustable shock absorbers.

HORNET
The 1/10th Hornet is one of Tamiya's most popular ever R/C cars and is credited with helping to kick off the two-wheel-drive off-road buggy craze when it was first launched back in 1984.

DOING THE

Two and four-wheeled British marques battled off-road in our favourite video of 2019. **Matt Prior** was there

PHOTOGRAPHY MAX EDLESTON

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> I love the Ariel and it had been a while since I drove one. So I pitched up too

This year, Triumph launched a new version of its Scrambler motorcycle. It's a 1200cc twin and is almost as ruggedly handsome as the bloke riding it here, a former off-road champion called Matt Reed who runs the Triumph Adventure Riding Experience in Wales.

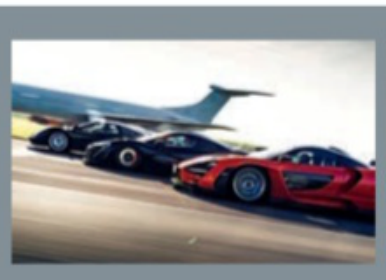
Triumph was going to take the bike to Matt to shoot some promotional video in a deserted forest and, well, the short of it is that I love the Ariel Nomad and it had been a while since I last drove one. So I pitched up too.

So there we were, in Wales, with Reed on the motorcycle and me in the Nomad, and between us we came up with a long, rough circuit coursing through the trees, with a pretty simple brief to shoot some brilliant pictures and video and end up with a 'lap' time at the end of it, to decide which was quicker. A lap of a place I'd never been to before but where Reed operates on most days of his working life. (Sorry, just wanted to get my excuses in early.)

You can buy the Scrambler in two forms, XC or XE, with this range-topping XE model getting better dampers and costing from £12,500. It's a bit retro, to the extent that technically Triumph calls it a Bonneville derivative and lists it in its 'modern classics' range. In classic style it gets twin rear shocks, one each side of the wheel, whereas proper modern dirt bikes would have a single big shock mounted to a swing-arm ahead of the rear wheel, allowing greater and quicker suspension movement. →

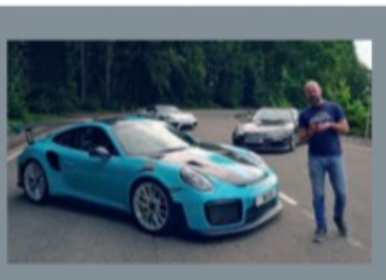
Triumph is a twin-shocker but rider Reed (left, on right) knows his stuff

WHAT'S THE BEST 4X4 PICK-UP TRUCK?
Want to know which is the best 4x4 pick-up truck? Check here for a not entirely objective set of tests, although some do include pulling a Unimog.



McLAREN F1 vs P1 vs SENNA
To get a McLaren F1 on a circuit is a special occasion. To line one up alongside both a P1 and a Senna is remarkable. One of our favourite videos ever.

RESTOMODS: ALFAHOLICS GTA-R 290, JIA INTERCEPTOR R, TUTHILL PORSCHE 911
Old cars get given new leases of life thanks to creative people and some fabulous, if pricey, engineering.



GREATEST PORSCHE GTS CAYMAN GT4 MEETS 911 GT2 RS AND GT3 RS
What's the best car in Porsche's series of GT-badged cars? Is it 2, 3 or 4? We endeavoured to find out.

DRAG RACE: BMW S1000RR vs McLAREN 720S vs ARIEL ATOM 4
Superbike meets supercar meets a super car, albeit not a supercar, against the clock on a deserted runway.

11:12/20:19

OUR FAVOURITE 10 VIDEOS OF THE YEAR
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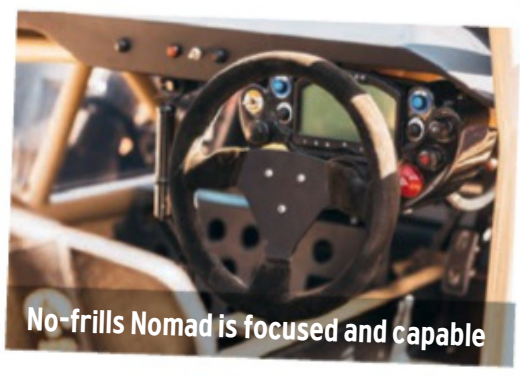
Triumph Scrambler, on home turf, had the measure of the Nomad

But the bike magazines rate the Scrambler as much more serious than it looks. Triumph throws in a free GoPro video camera when you buy one, too, to encourage owners to take it on some adventures and bring back the footage.

I know my way around four wheels a bit better than two, which is why I'd arrived in a Nomad, Ariel's first foray into off-roading and still my favourite SUV. I know it's only two-wheel drive but it's as capable as any 4x4 I could want. Light and with a 245bhp, 2.4-litre Honda engine driving the back wheels through an H-pattern gearbox, I know it's a riot. Ariel offers three sets of dampers, from 'quite good' through to 'WRC-spec', and on increasingly aggressive off-road tyres, with this example's in the middle.

There'll be a new Nomad at some point, using some of the learnings from the latest Atom 4, but this one, launched in 2015, still has so much going for it. It weighs a little under 700kg and although you can get a supercharged version, 245bhp is plenty for me in dust like this.



No-frills Nomad is focused and capable

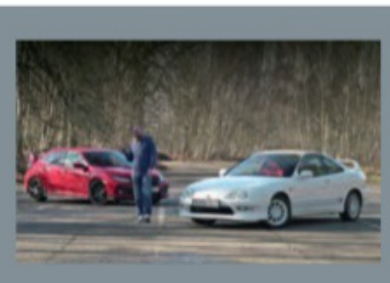
The Nomad is responsive and has a remarkable ability to smooth out or skip over lumps that most off-roaders would pound into. What I perhaps like most is that it retains a sports car-like balance on account of being so light, and rear-drive only.

I got it around our course in 3min 42sec. It was a long course and I hadn't seen it much before, okay? Reed went next on the Triumph and lapped 13 seconds faster than me, in 3m 29sec which, really, I didn't think was too bad. If it was at the end rather than the start of the day I'd have better known where I was going and might have been closer. So it was more bloke beats bloke than bike beats car and I can live with that because the idea was to make a great vid. I think we did. You can find it, plus our other favourites from this year, online.

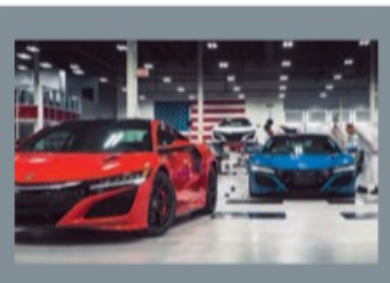
PORSCHE TAYCAN REVIEW
Porsche's first EV, the Taycan super-saloon, gets driven on the road ahead of its public launch.

TOYOTA SUPRA vs BMW M2 COMPETITION vs ALPINE A110 vs PORSCHE 718 CAYMAN
The sports car test of the year: the new Toyota Supra goes up against its closest rivals.

BMW E30 M3 vs E46 M3 CSL vs M2 COMPETITION: WHICH IS THE BEST M-CAR OF ALL TIME?
Just how good is the latest BMW M2 Competition compared with others from the M-car back catalogue?



HONDA INTEGRA TYPE R MEETS 2019 CIVIC TYPE R (AND VTEC EXPLAINED)
How does the latest Civic Type R feel alongside perhaps the best-handling front-wheel-drive car of all time? Here's the answer.

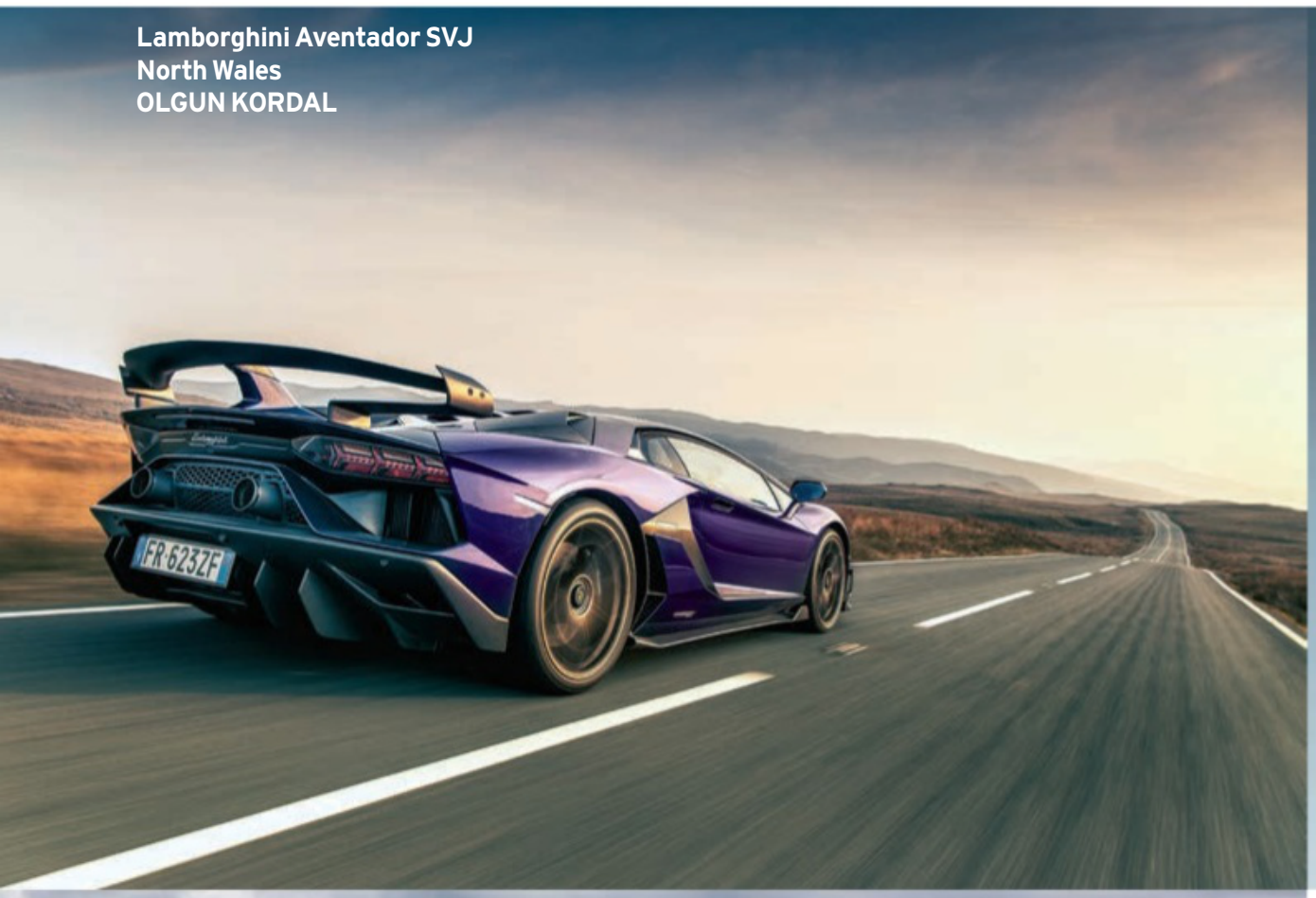


HOW TO BUILD A SUPERCAR / HONDA NSX FACTORY TOUR
Ever wondered how you build a supercar? We went behind the scenes at the US factory where Honda builds the exclusive NSX.

11:12/20:19

OUR FAVOURITE 10 VIDEOS OF THE YEAR
WATCH NOW AT AUTOCAR.CO.UK/VIDEO

SHARE SAVE



Lamborghini Aventador SVJ
North Wales
OLGUN KORDAL

Toyota Yaris GRMN
Great Orme, north Wales
MAX EDLESTON

Alfaholics GTA
Llandow Circuit, south Wales
OLGUN KORDAL

"Could you jump a bit higher, please?" asked snapper Luc Lacey to driver Richard Lane ahead of this spectacular Bowler jump shot. Not happy with Richard's first attempt, Luc could have no complaints about the second – more concerted – effort.

You can see why Wales is so popular with our photographers after looking at the trio of photos to the left. Olgun Kordal said it was worth getting dust in his eyes for the low-down Lamborghini tracking shot, and worth ruining a pair of Converse plimsolls for the equally stunning shot of the gorgeous Alfaholics GTA-R (you wore Converse in Wales, in November, Olgun?).

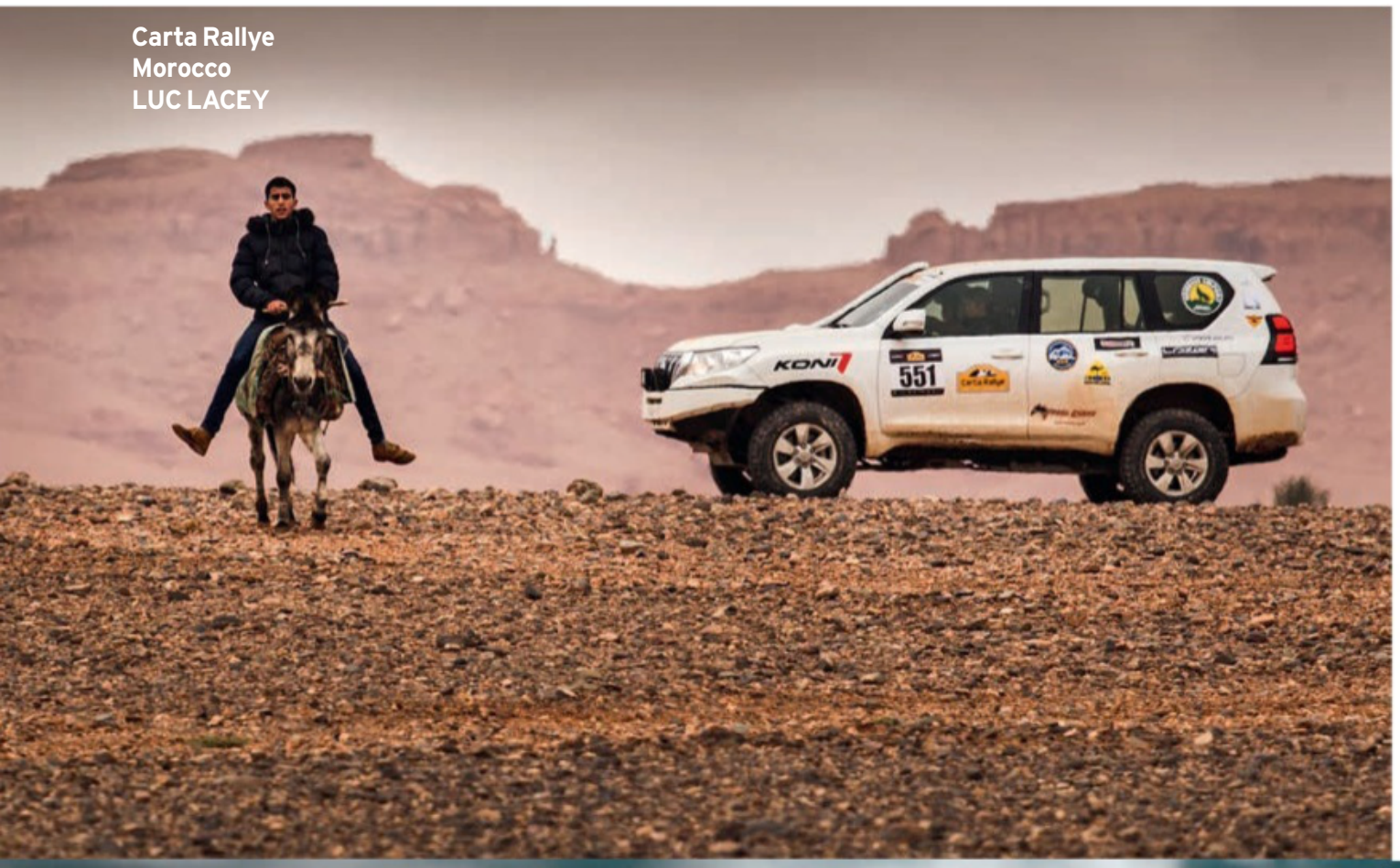
"I love the contrast of the greenery with the ribbon of Tarmac running through it," says Max Edleston of his shot of the spectacular Great Orme road.

FREEZE FRAME

Another year, another photo album crammed full of world-class pictures of amazing cars doing incredible things. Our snappers choose their favourites

Bowler Bulldog V8 SC
Bovington Camp, Dorset
LUC LACEY

Carta Rallye
Morocco
LUC LACEY



"A rear-wheel drive, rear-engined car with Mauro Calo at the wheel always makes for a dramatic image," says Olgun Kordal of his Porsche 911 shot.

If the 911's natural habitat is a track, then the Range Rover Velar felt just as at home on the off-road course at Land Rover Experience West Country. "It reminds me of a photo in National Geographic magazine, of a tiger creeping through towards a lake and it's prey," says Max Edleston. "I feel this is the automotive equivalent." Maybe, Max, if you squint a bit..

Luc Lacey had his own pitch for National Geographic on his trip to the Carta Rallye in Morocco. "This young lad was slightly perplexed at finding a car full of cameras documenting his daily commute," he says.

Porsche 911
Anglesey Circuit, north Wales
OLGUN KORDAL

Land Rover Experience
West Country
Honiton, Devon
MAX EDLESTON

OUR BEST RENDERS OF 2019

HONDA TYPE E

MASERATI ALFIERI

PEUGEOT 208 RALLY RAID

Our resident artist Ben Summerell-Youde has been busy again previewing the cars of the future – or, in some cases, the cars of his own mind. Starting at the bottom, this rally raid-style Peugeot 208 sadly will remain the stuff of Ben's dreams. "As soon as the new 208 pictures landed I wanted to create a 208 GTi, but the factory yellow paint just shouted 405 Dakar to me," says Ben, who rates the 208 as the supermini segment's best looker. White wheels and a body kit were the order of the day for the sporty Honda E, too. "I got a bit carried away, which is fine, because no one actually has to build what I come up with." The Maserati Alfieri is destined for production, however, and we hope Maserati is taking inspiration from Ben.

FAVOURITE CONCEPTS OF 2019

Bravo to Audi, Mercedes-Benz and Aston Martin for filling our concept car podium this year, each chosen by our in-house designer Ben Summerell-Youde. "It's good to see a concept that doesn't just have wider arches and some knobbly tyres," says Ben of the Audi AI-Trail. "Silent, battery powered off-roading appeals far more than plug-in sports cars." Ben feels the Mercedes EQS really shows how electric propulsion can benefit proportions. "I hope the new S-Class isn't too dissimilar." There's not an electric motor to be seen on the Vanquish concept, Aston's preview of a mid-engined supercar. "It looks fresh, and has a better visual balance to it than the Valhalla," the latter car the Vanquish's big brother.

David Brown Mini Remastered
Chelsea Bridge, London
MAX EDLESTON

Central London rush hour traffic in fading light threatened to turn this David Brown Mini Remastered shoot into one to forget, until a gap appeared on Chelsea Bridge. "It looks a bit like being back in the '60s," reckons Max Edleston, who was born in the 1990s...

"I'm quite a fan of the cool, relaxing tones of this one," says the cool, relaxed Luc Lacey of his Fiesta ST snap, taken at dusk. "A simple long exposure and a passing car highlighting the curves of the road lead your eyes through the landscape."

And it's a fading-light, last-shot-of-the-day hat-trick with Olgun Kordal's Ferrari shot. "The light was finessing the side of car, highlighting its muscular stance."

Ford Fiesta ST
North Wales
LUC LACEY

Ferrari F8 Tributo
Emilia-Romagna, Italy
OLGUN KORDAL

Dallara Stradale, Ariel Atom
Anglesey Circuit, north Wales
LUC LACEY

"A unique angle on two unique machines," says Luc Lacey of the Dallara Stradale and Ariel Atom he caught together at our Britain's Best Driver's Car contest. "A bit of camera trickery was used here, with the camera being mounted six feet from the car." Sshh, Luc, you're giving away all the secrets...

Olgun Kordal is giving a sneek peak here of a feature we're running next month, starring this Ferrari F40. "It's a dream car and was a joy to shoot even if it was a very busy Cotswolds road," says Olgun. A slow shutter allowed the background to blur into insignificance."

'Insignificant' isn't a charge you'd level at the size of the BMW Concept 4's grille, not that Olgun's shot here shows it (thankfully). Finally, Luc was up at 4am to shoot the Evoque in Greece. "I love the calmness the mist and motionless turbines give to this image."

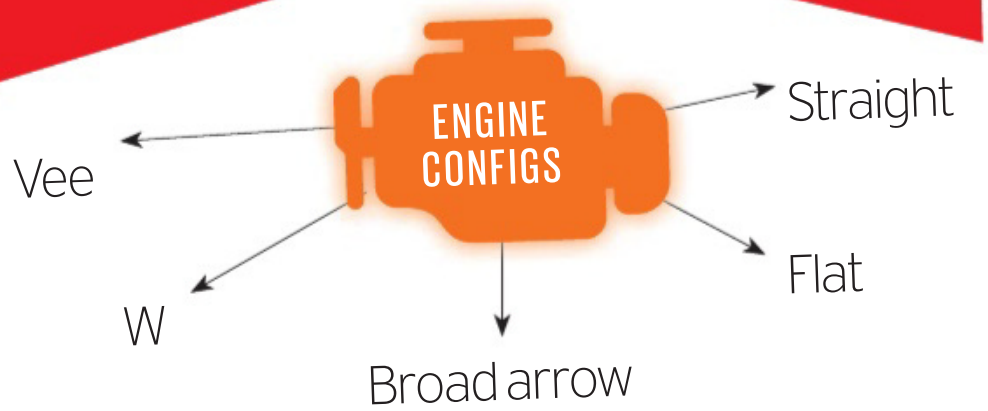
Ferrari F40
The Cotswolds
OLGUN KORDAL

Range Rover Evoque
Greece
LUC LACEY

BMW Concept 4
Studio in Munich, Germany
OLGUN KORDAL

FRANKEL'S FESTIVE MISCELLANY

'Tis the season of goodwill, so, pray, let veteran road tester and Autocar's jolliest man **Andrew Frankel** entertain you



EXTANT BRANDS OWNED BY GENERAL MOTORS

1. Cadillac
2. Chevrolet
3. Buick
4. GMC
5. Holden

EXTINCT BRANDS ONCE OWNED BY GM

1. Saab
2. Saturn
3. Oldsmobile
4. Hummer
5. Pontiac

Drivers who have won the Monaco Grand Prix and Le Mans 24 Hours

Tazio Nuvolari
Maurice Trintignant
Bruce McLaren
Fernando Alonso

Drivers who have won the Indianapolis 500 and Monaco Grand Prix

Juan Pablo Montoya

Drivers who have won Le Mans and the Indianapolis 500

AJ Foyt

The only driver to have won the Indy 500, Monaco GP and Le Mans

Graham Hill

RANDOM RACING FACTS

1 The top six finishers of the 1973 Monaco Grand Prix finished in the same positions as they would at the end of the championship.

2 The 2020 British Grand Prix marks the 70th anniversary of the start of the Formula One World Championship in 1950. It was also the British Grand Prix and also held at Silverstone.

8 The Lotus 76 of 1975 was fitted with a clutchless transmission and V-shaped brake pedal to allow its drivers the option of left-foot braking.

7 The wiring loom of the Porsche 909 Bergspyder was made from silver thread.

5 The Indy 500 was part of the F1 World Championship for 11 seasons, from 1950-'60.

3 Britain and Italy are the only countries to have held grands prix in every year since the start of the F1 World Championship.

9 When Brands Hatch was first used, cars and bikes raced around the circuit anticlockwise.

6 Claudio Langes tried to qualify for 14 grands prix, all in 1990, and never started a race.

4 Where fathers and sons have raced in F1, fathers have been twice as likely to win a race.

10 The Marathon De La Route was the world's longest motor race and was held at the Nürburgring between 1965 and 1971. In 1967 it was won by a Porsche 911 driven by Vic Elford (among others), his winning margin over the second placed car being just short of 1000km.

11 Alan Stacey became a works Lotus F1 racing driver despite having an artificial lower right leg and having to use a twist grip motorcycle throttle. He was killed at the 1960 Belgian Grand Prix, some say after being hit in the face by a bird.

12 The knob on the gear lever of a Porsche 917 is made from balsa wood and its ignition key drilled, both to save weight.

AUTOMOTIVE URBAN MYTH Duncan Hamilton drove while drunk to win Le Mans in 1953

FILM STARS IN CARS

1 Steve McQueen came second in the 1970 Sebring 12 Hours sharing a Porsche 908 with Peter Revson, despite having a left foot in plaster. Had he been anything like as fast as Revson, they'd have won.

2 Paul Newman came second at Le Mans in 1979, driving a Porsche 935 in usually very wet weather. The race was won by brothers Don and Bill Whittington, who would both later serve time for fraud.

3 James Garner was such a natural driver than he actually doubled for other members of the cast during the filming of Grand Prix.

4 Burt Reynolds owned his own Nascar team, called Mach 1 racing.

5 Gene Hackman raced a Toyota for Dan Gurney at the 1983 Daytona 24 Hours, finishing in 57th place.

6 Rowan Atkinson used to own a Lancia Thema 8.32.

7 Princess Grace of Monaco died in a Rover P6.

8 Successful sports car driver and actor Patrick Dempsey would rather be a racing driver than a film star.

SOME CAR MAKES BEGINNING WITH 'A'

Aga
Albany
Alfa-Romeo
American Bantam
Amplex
Arrol-Johnston
Aston Martin
Atalanta
Austro-Daimler
Avanti
AZLK

TYPES OF GEARBOX

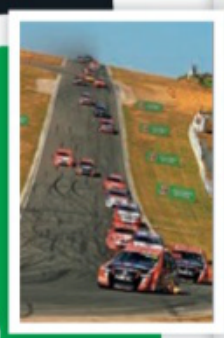
1 Manual
2 Robotised manual
3 Automatic
4 Semi-automatic
5 Dual-clutch
6 Direct-drive
7 Continuously variable
8 Straight-cut
9 Synchromesh
10 Crash
11 Flappy paddle

TOP GEAR PRESENTERS

1 Angela Rippon
2 Noel Edmonds
3 Kate Humble
4 Brendan Coogan
5 Jon Bentley
6 Sue Baker
7 Frank Page
8 William Woollard
9 Jason Dawe
10 Jason Barlow

Grands prix on the F1 calendar Lewis Hamilton has not yet won

CURRENT OR FORMER MOTORSPORT FACILITIES



1 Barbagallo Raceway (Australia)
2 Bushy Park (Barbados)
3 Autodromo Internacional Ayrton Senna (Brazil)
4 Dracon Race Track (Bulgaria)
5 Calabogie Motorsports Park (Canada)
6 Circuits des Remparts Angoulême (France)
7 Solitude (Germany)
8 South Dakota Circuit (Guyana)
9 Irungattukottai Race Track (India)
10 Autodromo Riccardo Paletti (Italy)
11 Mellaha Lake (Libya)
12 Agadir (Morocco)
13 Pukekohe (New Zealand)
14 Ponce International Speedway Park (Puerto Rico)
15 East London (South Africa)
16 Rest And Be Thankful (Scotland)

14 INDIGENOUS CURRENT AND FORMER MAKERS FROM COUNTRIES NOT KNOWN FOR MAKING THEIR OWN CARS

1 FSO (Poland)
2 Rimac (Croatia)
3 Pegaso (Spain)
4 Mastretta (Mexico)
5 Shamrock (Ireland)
6 Puch (Austria)
7 Naz (Azerbaijan)
8 Minerva (Belgium)
9 Tatra (Czech Republic)
10 Zenvo (Denmark)
11 Electra Meccanica (Canada)
12 Spyker (Netherlands)
13 Monteverdi (Switzerland)
14 Wallyscar (Tunisia)

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Damien Smith

RACING LINES

Abu Dhabi ended F1 year but not Ferrari-Hamilton rumours

RACING'S EXTINCTION REBELLION

Motorsport is responding to a changing world. But will it be enough?

Motorsport so often appears insulated from the real world, but it is not immune to its challenges. Especially now. On the surface, the 2019 season was business as usual, as racers around the globe instinctively kept their foot in, offering a welcome distraction from the stuff that really matters. But as in every corner of society, climate change cast its lengthening shadow. The car giants and corporate sponsors are already roused to the threat and are responding. The question is, will the public still be watching?

Motorsport can and will have a future in this changing world (probably), but much like the wider automotive business, what shape it will take is not yet clear. There's a sense that these might be the final years of motorsport as we've known it. Change is unsettling, sometimes unwelcome – but, in this case, entirely necessary if extinction is to be avoided.

LEWIS HAMILTON FLIRTS WITH FERRARI

The world's best racing driver is certainly not afraid of change. Back in 2012, Hamilton was alert to the way the wind was blowing and made the most important decision of his career when he left a declining McLaren for the potent might of Mercedes. Five drivers' world championships later, to add to the one he'd clinched with McLaren, we'd suggest he made the right call.

But will he do so again? Hamilton is 35 in January and, after another 11 grand prix victories in 2019 that take his career tally to 84, has Michael Schumacher's record of seven titles and 91 wins within his reach. But even with the world at his feet, the lure of Ferrari appears to be working its old scarlet magic.

At the Abu Dhabi finale, the story threw up a desert storm. The Italian media reported two meetings this year between the driver and Ferrari chairman John Elkann, and neither team principal Mattia Binotto nor Hamilton himself moved to quench the flickering flame.

On the face of it, why would he switch for 2021 when his current contract expires? Metronomic Mercedes-AMG F1 is the greatest force we've seen in motorsport – ever – and although its F1 future beyond next year is not guaranteed, Daimler seems highly unlikely to end a programme that is proving so fruitful.

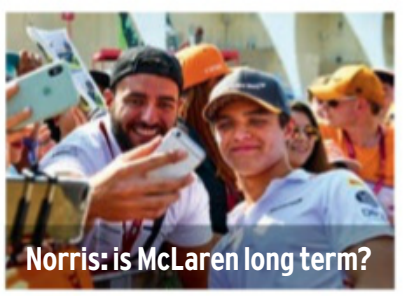
In contrast, Ferrari's racing operation has been shambolic for too long. Binotto has much to address, far beyond the driver headache of a fading Sebastian Vettel versus a flourishing Charles Leclerc. Does Hamilton really need the aggro Ferrari would bring at this stage of his life?

But here's the thing: it's *Ferrari*, and even in this fast-changing world, it still means something – perhaps everything. John Surtees, Niki Lauda, Alain Prost, Schumacher, Fernando Alonso, Vettel and allegedly Ayrton Senna, had he lived: none of them could resist. Can Hamilton?

BIG QUESTIONS FOR NEW STARS

Max Verstappen is another who might consider embracing change. The Dutchman still lacked maturity in his fifth F1 →

> "Even in this fast-changing world, Ferrari still means something – perhaps everything"



Norris: is McLaren long term?

MOTORSPORT IMAGES

> With its new rules, Le Mans is ensuring it remains relevant for at least the next decade

Toyota ruled alone at Le Mans. Bring on the hypercars...

←season, but the signs are he's ready to win a world championship. But are Red Bull and Honda? That's what he'll surely be asking as his current contract draws to a close next year.

Charles Leclerc, only one year into his 'dream' life at Ferrari, might also need to do the same. Lewis Hamilton's example shows that making the big calls at the right time defines careers. Given Hamilton's apparent temptation, it seems unthinkable that Leclerc could turn. But like Verstappen and unlike the champ, it's all before him rather than behind him. Will Leclerc keep faith in Ferrari or might he court Mercedes – the only team with title credentials right now?

Then there's Lando Norris, who had a wonderfully composed rookie season at McLaren. The team has him under wraps for now, but will he ever win a world championship with a mere 'customer'? Fourth was a decent return for this once-great F1 company, but how much further can it rise without full manufacturer support?

HYPERCARS CAN'T HIT LE MANS SOON ENOUGH

In sports cars, Fernando Alonso added a third world title to the pair he won in F1 back in 2005-06. He, Sébastien Buemi and Kazuki Nakajima also added a second Le Mans 24 Hours to their tally (albeit luckily and at the expense of Toyota team-mates Mike Conway, Kamui Kobayashi and José María López, who had them licked for pace). But this was far from a vintage year for the greatest race of them all.

The new hypercar rules will take their bow when the 2020/21 World Endurance Championship kicks off next summer. Until then, sports car racing is treading water, with only Toyota in the hybrid LMP1 category. Fixing performance to allow privateers to win, as Rebellion did in China this autumn, doesn't wash. But by creating new rules that make sense to car manufacturers, both technically and financially, Le Mans is ensuring it remains relevant for at least the next decade.

At least as significantly, the French rule makers are promoting hydrogen fuel cell technology, too. Racers have to stay at least one step ahead of the game in this changing world, and here's a neon sign that they know it.

FORMULA E: RACING CAR MAKERS CAN LOVE

But the best example of motorsport taking steps to secure its future is Formula E. The all-electric single-seater series is already in its sixth season, long before most of us have made the switch to electric road cars, and that foresight means it boasts full-blown factory teams from the German 'big four' – Mercedes, Porsche, BMW and Audi – plus DS, Jaguar and Nissan. It's surely the envy of F1, WEC and the World Rally Championship, which has just lost Citroën. Meanwhile, desperate post-Dieselgate Volkswagen is trying to win back lost PR yards by abandoning fossil-fuel motorsport completely. How long before others follow?

But for all its allure for big-brand car makers and sponsors, Formula E is not yet loved by the public. Traditional racing fans and car lovers still find it a turn-off – and that's a worry if this is the future.

Then again, these are pioneering days and, as a species, we don't respond well to change – even if we do tend to evolve eventually. For the sake of modern motorsport, we'd better. The car makers are banking on it.

Formula E has been better at attracting car makers than fans

MOTORSPORT IMAGES

Take a bow, 2019 champions

Beyond the glare of Formula 1, these drivers have shown themselves as true champs

Turkington led the way to claim his fourth BTCC title

Colin Turkington

The Portadown driver isn't the flashiest driver in the British Touring Car Championship but, as he showed by wrapping up his record-equalling fourth title, he is definitely one of the best. He had the benefit of running the rapid new BMW 3 Series but still drove brilliantly to fend off challenges from team-mate Andrew Jordan and works Honda driver Dan Cammish.

Ott Tänak

The Toyota Yaris WRC driver ended Sébastien Ogier's six-year World Rally Championship title run in style, securing the crown with six event victories. The Estonian was crash prone in his early career, but his form this year showed his development. He also caused a stir by jumping ship from Toyota: he'll defend his crown in a Hyundai i20 WRC.

Jamie Chadwick

The 21-year-old from Bath was a pre-season favourite for the inaugural women-only W Series championship. She rose brilliantly to those expectations and also served as a fine ambassador for a category that many were sceptical about. Chadwick is a bright talent for the future – regardless of her sex or who she's competing against.

Chadwick is a talented racer

Alonso won Le Mans and WEC title. Indy 500? Maybe 2020...

Jean-Eric Vergne

Once fuelled by Red Bull (well, the drinks firm's driver academy), Vergne has rebuilt his career in Formula E, a championship powered by electricity. Despite the increasing level of competition in the single-seater championship, Vergne became the first driver to clinch a second drivers' title – and helped his DS Techeetah team secure the makes' crown.

Fernando Alonso

Alonso kept himself busy in his first season of Formula 1 'retirement'. He won the 2018/19 World Endurance Championship crown and his second straight Le Mans 24 Hours title in the Toyota TS050 Hybrid he shared with Sébastien Buemi and Kazuki Nakajima, and made his rally raid debut in preparation for the 2020 Dakar Rally in a Toyota Hilux. He also returned to the Indianapolis 500 – but since he failed to qualify, we won't dwell on that...

RISING STAR

ROBERT SHWARTZMAN

From its foundation in the 1950s, Formula 3 has been an indicator of true racing driver talent and its latest leading light is Russian Robert Shwartzman, who this year claimed the inaugural FIA F3 Championship. The 20-year-old took three victories in the Formula 1 support series and kept scoring consistently, which allowed him to clinch the crown at his home round at Sochi with a pair of podium finishes. He's already a member of the Ferrari Academy for young talent and Formula 2 is likely to be next as he strives to emulate countryman Daniil Kvyat and make it to the top.

IT WAS ALSO A GOOD YEAR FOR...

Former McLaren protégé Nyck de Vries (pictured) claimed the Formula 2 championship and parlayed that into a works Mercedes Formula E seat. Meanwhile, Nicholas Latifi turned his runner-up spot (with the help of some financial support) into a Williams Formula 1 drive.

Chris Ingram became the first British driver since Vic Elford in 1967 to win the European Rally Championship. Another unlikely British success story came at Pikes Peak, with Robin Shute setting the fastest time on the hillclimb in a Wolf-Honda.

American Josef Newgarden earned his second IndyCar championship and his Penske team-mate Simon Pagenaud became the first French winner of the Indy 500 since 1920 (in the process turning his dog into a social media sensation).

In the name of the father

It is perhaps inevitable that Mick Schumacher should follow in the footsteps of dad Michael and tread a path towards F1. But, he tells **Dieter Rencken**, he wouldn't have it any other way

Silver spoon or tainted chalice? Blessing or curse? These are the searching questions every son of a famous father poses to his soul at some stage, mostly when inevitable comparisons with Daddy are aired, or when Junior knows he's fallen well short of the expectations that come with the family name.

This year Mick Schumacher has cause to ruminate: he has been competing in Formula 2 for Prema, a team with an illustrious history in the series. From 20 starts, the 20-year-old son of seven-time F1 world champion Michael scored top 10 finishes on eight occasions, including claiming a maiden win in the sprint race in Hungary.

On the flipside, the 2018 European Formula 3 champion failed to score 12 times, a tally that includes five retirements, mainly through errors. A mixed bag, then, yet this personable and polite young man is nonetheless a member of the Ferrari Driver Academy (FDA), having turned down offers from the Mercedes F1 Team to join its junior programme – the path his father trod 30 years ago.

So far, so different, yet there is absolutely no doubt his father's genes run deep, as considered responses to questions posed between laps in Ferrari's F8 Tributo at Fiorano – the circuit at which M Schumacher Sr clocked upwards of 50,000 miles annually in his quest for driving perfection – make clear.

Mick's earliest memories of Ferrari's test circuit, situated a stone's throw from the legendary gates to motoring utopia, are of thrashing a 50cc motorcycle around the grounds while his father sought yet another sliver of lap time.

"It's amusing," grins Mick. "We're sitting where I used to watch my father driving around, and today I'm driving a Ferrari road car. The last time I was here, I rode my motocross bike."

"That's my memory of Fiorano," he says, adding that photographs show his first visits were as a babe-in-arms, then as a toddler. "I've seen photos of myself in thick jackets, suggesting they were taken during winter testing."

He recalls, too, the Montana restaurant across the bridge, where "Oma Rossella" – chef and (grand) mother figure to generations of Ferrari drivers – served him pasta. Back then, testing was, of course, effectively unrestricted, so Fiorano was his father's second home, yet today Mick is driving the circuit for the first time, in a road car as part of the Tributo's launch programme.

"Testing is prohibited, so it [usually] makes little sense to lap in a road car when I could be in the simulator, which is more productive," says Mick.

That said, he is clearly enjoying the Tributo, saying it feels more like a heavy race car than a road car, adding that he finds the shift lights on the steering wheel helpful and the seamless power delivery out of the twisty bits equally enjoyable.

"I've accelerated out of most corners in third gear; usually they are second-gear corners," he enthuses. "I'm impressed with how →

Mick Schumacher at Macau in F3. He won the European series

F3 success led to an F2 drive with Prema

> “Fiorano was his father’s second home; today Mick is driving it for the first time”

MOTORSPORT IMAGES

Mick’s maiden F2 victory came in Hungary

←the motor pulls from low revs, and the speed the car carries through corners.

“I’m able to lean on the front wheels and pour on power, which would usually result in understeer. Normally you’d have to wait until the car is pointing straight ahead before flooring it, but with this one I’m able to carry speed into the corner, turn in and accelerate.

“I have the ESP and traction control off... and play with Race and Sport modes.”

Mick confesses to having dreamed of driving a Ferrari as a youngster, and not any Maranello product but a 458 Italia – developed with input from his father: “I sense my father’s DNA in every Ferrari, and that makes me extremely proud.”

Is that why Mick accepted Ferrari’s offer rather than join the Silver Arrows, with which his father ended his second F1 career?

“It’s to do with history,” he says slowly. “I feel drawn to here, I grew up here and with the exception of one season – Van Amersfoort in Formula 4 – I’ve driven for Italian teams. In karting I drove for Tony Kart, and with Prema I’m with an Italian team.

“The passion [Italians] have for motorsport is wonderful, and it is equally discernible at Ferrari. It’s special to be in Maranello.”

He admits to being in Maranello “as often as possible, learning tricks and tips that help me in Formula 2, which is close to Formula 1”, and believes membership of the FDA makes him a better race driver: “It can’t be described or expressed in numbers, but it’s like being part of a big family – the Ferrari family.”

Equally, he feels a strong affinity to the last German world champion, Sebastian Vettel, whom he considers a mentor. “Just as my father was mentor to Sebastian, so Sebastian is my mentor,” Mick says. “Someone I feel connected to; with whom I regularly talk motorsport. I respect him enormously, and of course he has more than a few years’ experience on me.”

Talking of which, does Mick realise how revered the name Schumacher is in F1, and, in particular, in Germany? Does he not feel enormous pressure? “No, I mean... I’m Mick. And I love this sport. That to me is the most important thing.”

His father’s love for things automotive is legendary, so how does Mick, a Generation Z-er, view cars, which are fast losing favour among his peers? “It’s difficult to explain,” he admits. “Obviously they take you from A to B, but depending upon which car you’re in, you get different sensations when driving from A to B.

“It makes a difference, whether I’m driving a Fiat or a Ferrari. Obviously I’d rather drive a Ferrari, doing 300km/h, but that’s not permitted. That is a passion, and one reacts according to the car one is driving.”

Having referenced the Ferrari 458,

Schumacher's F2 season with Prema has had highs and lows

THE LEGACY OF MICHAEL SCHUMACHER

Seven world titles, 91 race victories, 68 pole positions: these are just highlights of the magnificent achievements of Michael Schumacher's time in Formula 1. Today – despite the here-and-now fashionability of Lewis Hamilton's achievements – he still stands by many measures as being the greatest racing driver of all time.

Beyond the statistics, Schumacher could electrify a grand prix even when the odds were against him. The soaking wet 1996 Spanish Grand Prix is widely regarded as his greatest race, so superior was he as he scythed up from sixth after a poor start to ease effortlessly away from everyone at a rate of two to three seconds a lap.

Then there was the 1995 Belgian Grand Prix, where he started 16th and made title rival Damon Hill look decidedly second best as he went on to win, his victory constructed around a delicacy on slicks in the wet that nobody else could live with. Or Spain again, in 1994, when his car jammed in fifth gear early on, yet he still came second. Or Hungary in 1998, when Ross Brawn switched him to a three-stop strategy that in effect required him to drive race-long qualifying laps without a single error. He duly won.

Yet no assessment of Schumacher can overlook his blemishes, chief among them the ruthless, win-at-all-costs attitude that put Hill in the wall in Adelaide in 1994, just as the Briton was about to slip into a title-winning position, or which led to him (unsuccessfully) ramming Jacques Villeneuve in Jerez in 1997 as the Canadian was overtaking his (again) mechanically stricken car to secure a world-title-winning result.

Today, of course, for all the advantages Michael's achievements, reputation and financial resource have given his son, they also stand as the greatest millstone around his neck.

At least for now, then, perhaps the fairer, more realistic goal for Mick would be to consider not the 15-and-a-bit seasons in which Michael scooped his titles and accolades, but rather the three at Mercedes that many fans would prefer to forget. For some, Michael's results made him look like a mere mortal, although keeping future world champion Nico Rosberg honest in the twilight of his career looks ever-more impressive with hindsight.

The point, though, was that this maturer, more balanced version of Michael Schumacher was delighted just to be there, racing again at the very highest level. Insiders say his time away from F1 proved to be impossibly hard for a man who simply craved the sensation of driving fast – so much so that he kept hurting himself falling off superbikes.

For all his success, he remembered just what a privilege it was to be an F1 driver. He looked all the more human for it, too. For every Hill and Villeneuve there are a dozen 'sons of' struggling to break through. If Mick Schumacher is happy to look to his father for inspiration, then simply having the opportunity to prove himself at the highest echelon is probably achievement enough for now.

JIM HOLDER

Schumacher loved racing but could be ruthless on track

Spain, 1996, was perhaps Michael's greatest drive

Mick "feels drawn" to Ferrari, where his father enjoyed so much success

it is blatantly obvious that Mick is a true-red petrolhead, but could he be tempted to try electric vehicles? "Not on the race track," he says flatly. So his approach to racing is very much of the old school, technically?

"Yes!" he says to that. "I love taking my kart to the track, tuning it. Carburettor off, carburettor on, swapping needles for optimum performance. With naturally aspirated engines, you are much closer to it and able to visualise how to make it faster. Turbos are more complicated, because you have boost pressures and bits and bobs that need computers rather than using your hands."

Like his father, who simply loved lapping, whether during racing or testing, Mick is fascinated by finding the limit, and admits to occasionally going beyond that fine line.

"In order to drive fast, you constantly need to be on the limit, and sometimes even over it," he says seriously. "To be right on that point, for the entire lap, then do it over and over again. You know when you've given your all, and it's addictive."

In closing, did the son of Michael Schumacher have a Plan B, one to remove him totally from motorsport? Or was his career preordained?

"Funny you should ask," Mick grins. "I discussed this with a friend, and we decided to each choose a make-believe job that did not involve engines. I simply could not find one. Everything had to do with engines, and always will. "Plan B? Plan A works fine for me..."

Like father, like son. A

The original interview was conducted by Motorsport Magazin, and quotes are used with permission.

MOTORSPORT IMAGES

Historic Racing Drivers' Club events attracted big grids

UK MOTORSPORT 2019 REVIEW

Great British motorsport

Exciting competition often flies under the radar. Here's a round-up

While Formula 1, the British Touring Car Championship and the World Rally Championship take the sport's limelight, they account for barely 40 of the 30,000 UK competition licence holders. Largely flying under the radar, a huge amount of competitive motorsport takes place every weekend of the year.

In truth, the 2019 season has been a mixed affair. External pressures weigh heavily on the sport and participants' ability to commit time and money to it remains a major factor. The groundswell of opinion against fossil fuels, noise, safety and litigation concerns, a shortage of volunteer officials and even Brexit uncertainty have all impacted the sport to some extent.

Yet it is far from all gloom and doom and grass-roots motorsport continues to deliver fun and enjoyment to thousands of people. The past year has provided significant success stories right across the sport.

In racing, proper low-cost competition has thrived and the new Citroën C1 Challenge broke all records with a grid of 100 cars and 500 drivers for a 24-hour marathon at Silverstone. Dozens of novices featured in the near-standard cars and there were an awful lot of damaged cars after 24 hours. Sadly, a second round-the-clock marathon planned for Anglesey in September had to be binned due to a dire shortage of marshals.

Elsewhere in racing, the Classic Sports Car Club set a strong pace with its winning formula of longer races and categories to cover just about any car. At a time when the traditional racing clubs like the British Automobile Racing Club and the British Racing and Sports Car Club were feeling the pinch, the CSCC was flying.

In historic racing, an oversupply left some grids and events looking rather thin, but Historic Formula 2 bucked the trend and more than 50 racing cars from the 1970s filled the grid at the Silverstone Classic. The Equipe GTS movement for production-based sports and GT cars of the early 1960s was strong and the Historic Racing Drivers' Club had another very

There have been six closed-road events since laws changed

healthy season. However, for sheer quality of wheel-to-wheel racing, nothing could rival Historic Formula Ford, where races were often decided by fractions of a second.

Away from racing, national-level forest rallying had an average year as the cost of competing rose at an alarming rate. The recent Roger Albert Clark Rally showed that many crews are now looking for a longer-distance adventure than the traditional one-day, 45-stage-mile events.

The real rallying expansion was in the small but growing number of special stages run on closed public roads. Six events have now been run since the relevant UK mainland laws were changed and competitors have queued up to tackle special stage rallying in the lanes.

Speed eventing had another strong season in both hillclimbs and sprints. The big venues like Shelsley Walsh and Prescott frequently draw overflowing entries and plenty of them are from newcomers in near-standard road cars. Competitive timed motorsport does not come any cheaper or accessible than this.

PAUL LAWRENCE

> "A huge amount of competitive motorsport takes place in the UK every weekend of the year"

ESTABLISHED 1895

Autocar

December F1 finales

January 1962/'63

THE RECENT 2019 Formula 1 season finale in Abu Dhabi was the first December grand prix held since 1963, when the confusingly-named East London circuit hosted the South African GP.

Jim Clark was champ long before he cruised to victory there in '63, but in '62 it went to the wire. The Lotus man faced the final nine points behind compatriot Graham Hill of BRM, putting the title in reach. And he certainly did the necessary, taking pole, then building his lead by up to a second per lap.

"The race had now settled into a pattern, with little apparent prospect of much happening," we reported. "A brief spatter of fine, wind-driven drizzle after 30 laps brought hope that Hill might have a chance to close," we said, "but it stopped after a few minutes, and as the laps mounted into the 50s, Clark had a 30sec lead.

"Then, on the 61st lap [of 82], there was haze of blue smoke from the tail of Clark's car, which grew rapidly thicker – and two laps later, he was out."

Hill would pick up the win, as the Cooper pair of Bruce McLaren and home hero Tony Maggs were nearly a minute behind.

Thus BRM's only drivers' and team' titles were secured, even if the Lotus had "the legs of the BRM" through the season.

"It was incredibly hard luck," we reflected. "As the rivalry built between these two, it has been of the friendliest sort and extremely pleasant to watch. Both are top-line drivers by any standards and would have shone in any season, whoever they were against."

PAUL LAWRENCE

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BIG FAT QUIZ ABOUT CARS

Stop your brain seizing up over the festive period with our motoring-themed quiz. **Andrew Frankel** pops the questions. Answers on p160

1 What animal will you find on the badge of a Gordon Keeble?

2 What was the name of Karl Benz's wife?

3 Which WW1 flying ace inspired Enzo Ferrari to use the prancing horse emblem?

4 In which town and country were Porsches first built?

5 Which two drivers put the equal greatest number of years between their first and last Le Mans wins?

6 What do the two-cylinder 500cc of a Fiat 126 and the 4.5-litre V12 that powered Ferrari to its first grand prix win in 1951 have in common?

7 Who founded Alfa-Romeo? Clue: it was not Nicola Romeo.

8 What do the three points on the Mercedes-Benz star represent?

9 What was the make and name of the first mainstream production radial tyre and on which car was it introduced?

10 From where was the famed Aston Martin DB5 'gadget car' from the film Goldfinger stolen in 1997?

11 What was unusual about the Ferrari 166S in which Clemente Biondetti contested the 1950 Italian Grand Prix?

12 What was unusual about the Kurtis Kraft that took pole position for the 1952 Indianapolis 500?

13 Which car manufacturer also makes condiment dispensers?

14 Which man was known as 'the hyphen in Rolls-Royce'?

15 What is the only car manufacturer selling cars in the UK whose name begins with a double letter?

16 Who was the only woman to finish in the points in a world championship grand prix?

17 Who was the first person to win a race in a car using disc brakes?

18 What and where was the world's first purpose-built race track?

19 Which is the world's oldest motorsport facility to have been in continual use?

20 What role in the James Bond film The Living Daylights did then Aston Martin chairman Victor Gauntlett turn down?

21 What is the unique claim to fame of Louis Chiron, after whom the Bugatti Chiron is named?

22 Why in 1964 did Porsche change the name of its new sports car from 901 to 911 after just 82 had been built?

23 What was unusual about Eddie Hall's participation at the Le Mans 24 Hours in 1950?

24 What four companies do the four rings of Audi represent?

25 What was unusual about the door bins of the Lancia Stratos?

26 Where are the interior door handles of a McLaren Senna located?

27 Who was the first person to travel at greater than 400, 500 and 600mph and where did he do it?

28 What was unusual about Vittorio Brambilla's victory in the 1975 Austrian Grand Prix?

29 Which was the last grand prix not won by one of Mercedes-Benz, Ferrari or Red Bull?

30 Which was the first production road car to use monocoque construction?

31 Which was the first production road car to use independent suspension?

32 Why did the 1939 Bentley Corniche fail to make it into production?

33 What was unique about the engine of the Cizeta-Moroder?

34 How many valves does a Ferrari F355 engine have?

35 What was unusual about the Ferrari Tipo 116 engine?

36 Which was the first production road car with a turbocharged engine?

37 What was the name of Wales's only indigenous production car manufacturer?

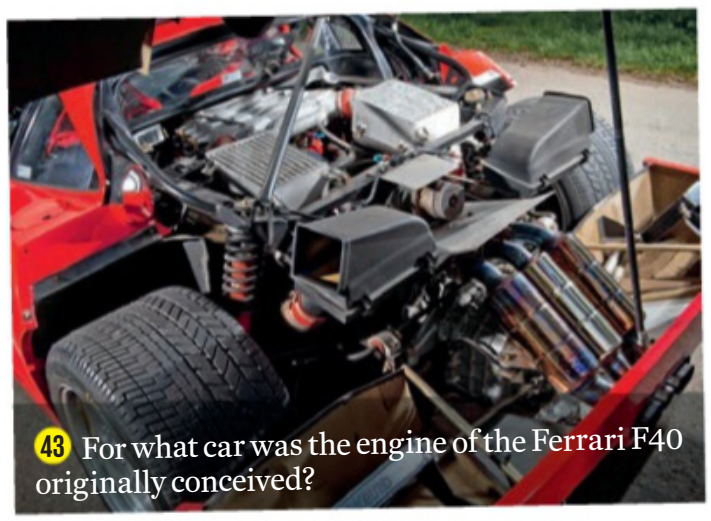
38 What were cars produced at the BMW Eisenach factory called after WW2 when the factory was located in East Germany?

39 What make of car was apparently driven by all Janis Joplin's friends?

40 What was the first car to come with anti-lock brakes?

41 What was the only four-wheel-drive car to win a Formula 1 race?

42 For what is Eleanor Velasco Thornton most famous?



43 For what car was the engine of the Ferrari F40 originally conceived?

44 In which song does the following lyric appear? 'Told my girl I'll have to forget her/Rather buy me a new carburettor'

45 Who is the only driver to have scored maiden F1 victories for three different constructors?

46 Before what year is a car entitled to call itself 'vintage'?

47 What is unusual about the Citroën 2CV Sahara?

48 What was the nickname of Ferdinand Porsche, son of Ferry Porsche and designer of the 911?

49 For which two brands was the 1965 Mexican Grand Prix an F1 maiden win?

50 In which year did Lotus dealer Caterham Cars become a manufacturer in its own right when owner Graham Nearn bought the rights to the Lotus 7?

YOUR VIEWS

WRITE TO
autocar@haymarket.com

Think again, Bristol

I totally agree with your Bristol city centre diesel editorial (Comment, 13 November). I have a December 2016 BMW 520d Luxury. It is EU6 and emits only 114g/km. It does not need AdBlue because it is clean enough without it. On long runs, it does 60mpg. I would have thought that this is better than many petrol superminis on pollution and economy yet it would be banned in Bristol.
Hugh P N Robinson
Hove, East Sussex

Bangernomics is the answer

I've just read Steve Cropley's piece about our personal carbon footprint for Autocar Subscriber Extra, which has plopped into my inbox, and I have to take issue.

I have recently persuaded myself that buying an electric car is absolutely not the thing to do to reduce your carbon footprint.

Turn instead to the Bangernomics pages of Autocar, because this is where our attention should be focused. This is recycling at its best.

Surely, the best thing we can all do is to run our existing cars into the ground, and once that's done, buy another banger and run that into the ground. Why don't we use what has already been manufactured rather than expel all of the energy (and associated pollution) and resources, including rare metals, required to produce an electric car that will probably be obsolete by the time hydrogen fuel cells are on line?

I think we are going down a one-way, dead-end street. We may pat ourselves on the back for making our air cleaner but we are just moving the problem somewhere else in the world.
John Penfound,
Andover, Hampshire

A stiff word

I've just read the tests of the new Renault Clio and Vauxhall Corsa (Autocar, 27 November) and agree that these, and most other superminis, provide a level of quality and ability that seem to confirm they are the only car you will ever need.

Kerry likes the Focus's ergonomics

LETTER OF THE WEEK

More smoke on Bristol ban

If I were to win a large amount on the lottery, I would be able to buy many of the expensive cars that are mentioned in this week's Autocar (27 November), starting off with the Mulliner open-top two-seater with W12 power and 626bhp. Next would be the Audi RS Q8, with 591bhp. This would be followed by the Mercedes-AMG GLE 63 S, which produces 603bhp. Then Audi's RS6, with a V8 and 3993cc. Finally, I would buy the Bentley Mulsanne, with its 530bhp 6.25-litre V8.

The only reason for these purchases? It would allow me to drive into Bristol next year and not upset the diesel-banning council, even though each one of those cars will produce three times more emissions than my current 2.0-litre diesel Skoda Karoq on a 69-plate.

If I fail to win the lottery, I will be stuck driving my old V8 Land Rover petrol, which on occasion produces as much smoke as the Prince of Wales trying to avoid the battleship Bismarck.
John Williams
Chester

WIN
Letter of the week wins this ValetPRO exterior protection and maintenance kit worth £48

ValetPRO
PROFESSIONAL VALETING SUPPLIES

But, having just reached my 69th birthday this week, I was reminded that however much I like these cars, I will never buy one. The reason is very simple: it is painful for me to get in and out of them. Probably like a lot of my peers, I am becoming stiff in my joints and I now find that I need a car that is a bit higher so I am on my second Skoda Yeti. It is ideal because I do not have to bend to get in or out.

I never see this mentioned in road tests and wonder if designers take it into account for their target markets.
Jeff Simpson
Via email

Alpina hits the heights

I was keen and interested to read the Audi RS6 test (First Drive, 27 November), having bought an Alpina B5 Touring last year. I am biased as a satisfied owner, but on many hard measures, the Alpina is ahead, such as on power-to-weight ratio, total power and top speed. It also leads in some of the softer areas, namely cockpit ergonomics (I hate low sat-nav screens), handling balance and feel on the limit and custom interior options. Of course, I haven't driven this Audi but I have owned Audis.

We did a village supercar run the northern Spain last spring and the Alpina B5 was a match for the fastest Ferraris and McLarens in the mountains and many were surprised by its capabilities in Sport mode. That's why I was a bit surprised that you didn't mention it as a competitor.
Gavin Howe
Via email

Gavin's B5 held its own with the exotica

Touch of madness

Having just read your end-of-term report on the Ford Focus (Our Cars, 20 November), the thing that sticks out about its interior for me is the retained use of physical controls for heating and so compared with the new Mk8 VW Golf's touchscreen.

How on earth are manufacturers allowed to do away with easy-to-use physical controls and hide away these essential functions in a touchscreen that takes eyes off the road and requires a steady hand on our unsteady roads? We cannot legally use our touchscreen phones while driving, but it's okay to attempt to finger the correct part of a touchscreen to adjust the radio volume or the temperature. Madness.

As for daylight running lights, which moron in charge decided they should be on the front only so that when inattentive drivers fail to turn their actual headlights on, the rear stays in the dark? Our legislators for road transport are completely incompetent.
Kerry Giddings
Bewdley, Worcestershire

Complex problems

I love my Audi A2, which is now 15 years old and starting to suffer some electric and electronic problems.

Can you see the influence of the Quattro Sport here?

This has made me look forward about 30 years when, we are told, there will be millions of fully autonomous cars on the roads, many of which would be 15 years old.

Inevitably, there will be malfunctions of their complex systems because their owners will not be able to afford the sort of maintenance required in the airline industry. I doubt whether an MOT test could include all the checks necessary to prove that the myriad of sensors, and the computer needed to co-ordinate the inputs and drive the outputs, would work properly in all conditions. There would also be a need for many more highly skilled technicians to rectify any faults.

In fact, all this is likely to mean that the car is scrapped long before it is 15 years old – so depreciation is sure to be horrendous. Is it really sensible for manufacturers to be spending billions on trying to reach a nirvana that seems so unrealistic? Much better to spend it on road improvements and driver education.

David Gee
Redditch, Worcestershire

Just can't see it

Nice story on the Audi RS Q8. What a lovely piece of engineering it is. However, I completely fail to see the 'inspiration' the Group B Quattro Sport rally car played in its design.

I think this is a case of artistic licence being taken to a whole new level. Who is Audi trying to kid?

Simon Lucas
Wakefield, West Yorkshire

Blinded by the lights

When stopped at traffic lights, I was taught to put the handbrake on and take my feet off the pedals. At night, this becomes more important because it avoids blinding the car behind you with your brake lights.

Even though the Highway Code still says this is correct, modern cars with 'auto hold' features are making it worse, not better. A friend with a Tesla 3 doesn't even know how to go about making his brake lights go off when stopped.

Rob Lightbody
Glasgow

GREAT REASONS TO BUY

NEXT WEEK'S ISSUE

ON SALE 24 DECEMBER

FEATURE

Road Test Yearbook 2019

Join us one last time this year to look back at who mattered and what counted over 12 months of extraordinary change in the car world

ROAD TEST

Volvo S60 Polestar Engineered

Potent plug-in hybrid performance car crowns Volvo's stylish S60 range

FIRST DRIVE

Audi RS Q8

RS6 running gear is dropped into a crossover SUV body. We rate it

EVERY WEEK

USED BUYING GUIDE

Alfa Romeo 156

A high point of Alfa's saloon car design, but what about ownership?

FIRST DRIVE

Vauxhall Corsa

Our first test of this crucial new PSA-derived supermini on home soil

LONG-TERM TEST

BMW i3S

Final verdict on life with an electric hatchback. Are we converted?

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CONTENTS SUBJECT TO CHANGE

THE AUTOCAR FLEET AWARDS 2019

Every year, the ever-glamorous Autocar car park houses a diverse range of models as we find out what some of the most significant new releases are really like to live with. So which were our favourites? **James Attwood** tots up the votes

THE B-ROAD B-EAUTY AWARD

For the most fun car to drive

WINNER FORD FIESTA ST

HIGHLY COMMENDED
MINI COOPER S,
McLAREN 720S

The Fiesta ST has long been our hot hatch of choice, and this latest version doesn't disappoint. As news editor Lawrence Allan notes: "It might have been one of the cheapest cars on our fleet but, for sheer British B-road entertainment, nothing – not even the McLaren 720S – beats it."

Road test editor Matt Saunders called the Fiesta "the best pound-for-pound hot hatchback there is", admitting that "I'd take one over a Focus ST, frankly".

Editor-in-chief Steve Cropley admitted he nearly plumped for the Fiesta but was swayed by our Mini Cooper S "because I felt confident slinging it about in extreme situations".

The McLaren 720S may have missed out on the award to cheaper options but it still won the praise of several of the team. Andrew Frankel, who was lucky enough to run it, admitted it was a "kind of obvious choice", before voting for the obvious choice. Obviously. →

THE CENTRE OF ATTENTION AWARD

For the car that received the most stares from passers-by

WINNER JAGUAR I-PACE

HIGHLY COMMENDED
BENTLEY CONTINENTAL GT, ALPINA B4 S

This award seemed destined to be wafted away by our long-term Bentley Continental GT but, when the votes were counted up, Jaguar's electric SUV snatched the coveted silverware.

"It's amazing how many people already know exactly what it is," said Steve Cropley. Mark Tisshaw added that the I-Pace "is an absolute show-stopper. It has a kind of futuristic beauty to it, and on top of that it's brilliant to drive."

I voted for the I-Pace because it's the first car I've driven home in since a Mercedes-AMG C63 that the kids on my street have stopped to gawp at and talk to me about – which is some feat for what is 'just another' SUV.

The Conti GT may have missed out on this award, but it did pick up plenty of votes. Rachel Burgess, who was only too pleased to take charge of it, justified her choice by simply saying: "Obviously." Managing ed Damien Smith, who spends his days trying to make our words more succinct, succeeded by simply saying: "Obvs." Er, totes.

> "The I-Pace is an absolute show-stopper. It has a kind of futuristic beauty to it"

THE END OF THE AFFAIR SPECIAL AWARD

TOYOTA LAND CRUISER

Our Toyota Land Cruiser wasn't actually eligible for this year's awards because it arrived on our fleet last year. But since Matt Prior racked up 38,000 miles in it, we felt it deserved a special send-off. Take it away, Matt.

"I look at all the cars we ran throughout the year, and there are more exciting cars, more expensive cars and cars that are better to drive, but the compromises that some ask mean there's not a single one I could have swapped into to cover the exact same 38,000 miles as I did in the Land Cruiser."

THE REALLY USEFUL FEATURE AWARD

For the most innovative/useful design feature, option or bit of in-car tech

WINNER BENTLEY CONTINENTAL GT ROTATING DASH

HIGHLY COMMENDED
KIA E-NIRO RANGE AND MILEAGE COUNTER

What does useful mean to you? Something that's of use, right? Yet somehow, a significant number of the Autocar team think that our Bentley Continental GT's rotating dashboard, which can flip a digital touchscreen around on itself to display an old-fashioned analogue clock, is somehow 'of use'. Explain yourselves, people.

Jim Holder admitted he was stretching useful "by about a million miles", but added "the, ahem, security-minded rotating dash oozed Bond appeal and delighted children of all ages". Rachel Burgess admitted it was "a bit of a gimmick but cool", while Tom Morgan's attempt to justify his vote was that it's "one of the most satisfying bits of kit you'll find on a car right now".

I remain unconvinced but will let the Conti's party trick keep the crown, if only to prevent a new Brexit-like crisis of democracy.

Still, bravo to those who nominated something actually useful: the Kia e-Niro's near-300-mile range and surprisingly accurate mileage counter. Steve Cropley said: "It's the only one of these I honestly believe you can trust. It's very accurate."

Now that is genuinely useful. If only it rotated...

THE I'D BUY IT AWARD

For the car we'd be most likely to spend our own money on

WINNERS KIA E-NIRO AND FORD FIESTA ST

HIGHLY COMMENDED
HONDA CR-V HYBRID, ALPINA B4 S

The ultimate judge of a long-term test car is whether we'd actually be willing to buy one for ourselves, and two machines were well clear of the pack. In fact, we simply couldn't split Ford's fantastic hot hatch and Kia's game-changing electric SUV in the vote, so they're sharing the trophy.

The e-Niro is perhaps the most usable, reasonably priced EV on the market today, with waiting lists still pushing a year. Steve Cropley said: "I should have bought our former long-termer. When these reach free supply, they're going to be everywhere."

Jim Holder, who ran the e-Niro, added: "By the time the Kia left us, I was gutted to find that racking up miles had done absolutely nothing to diminish its value due to the currently limited supply."

If the e-Niro won our hearts for making electric motoring truly viable and affordable, the Fiesta ST did so simply for being such good fun to drive. "You could use it every day and have an absolute ball while doing so," said Simon Davis. "It's a properly fantastic little car."

Potent Fiesta ST remains a usable car

Andrew Frankel called it "the best real-world driver's car here". →

THE KEEP ON MOTORING AWARD

For the best car to take on a very, very long journey

WINNER BENTLEY CONTINENTAL GT

HIGHLY COMMENDED
RANGE ROVER VELAR, ALPINA B4 S

Given that it has 'Grand Tourer' in its name, our Bentley simply wouldn't be denied in this category. Road tester Simon Davis praised it for being "plush, refined, beautifully engineered, powerful, comfortable – the list goes on", but did add that you might want to "watch the fuel bill".

Andrew Frankel actually used a Conti GT (although not the one on our fleet) for a very long journey, and said: "After 15 countries in 24 hours, I can confirm it has the best seats in the world."

The Range Rover Velar took the runner-up spot, with Jim Holder noting that: "It hasn't had the easiest ride since going on sale, with many people questioning its place in Land Rover's line-up. None of those people questioning it was driving it on a long journey, however."

Alpina's extensively reworked BMW won praise from several including Tom Morgan. "It's built for comfort but still able to reach 200mph on the autobahn," he said.

Burgess needed no excuses to drive far and wide this year

THE TOP PICK FOR THE TIP TRIP AWARD

For the car most suited to load-lugging

WINNER CITROEN BERLINGO

HIGHLY COMMENDED
RANGE ROVER VELAR, DAMIEN SMITH'S AGEING FORD S-MAX

No shock that the Berlingo walked this category given that, as Steve Cropley put it, it's a "style-free but cheery box on wheels, with the softest ride going, a smooth engine and better steering than you'd believe".

Ace snapper Luc Lacey was given custody of the Berlingo and found it had so much space, he was tempted to go out and buy extra photographic equipment to stash in the back. "It's got handy compartments galore, tons of space and sliding side doors for easy access," he enthused. It wasn't just equipment, either: Luc has admitted to sleeping in the Berlingo on the odd camping trip.

Mark Tisshaw nominated the Velar, saying: "Don't be fooled into thinking it's a car for poseurs: it's vast inside and can rough it in the real world like any Land Rover."

Meanwhile, Damien Smith insisted that when it came to tip trips, "nothing beats my old S-Max". See, there is still a market for MPVs.

THE CITY SLICKER AWARD

For the best car to thread through congested places

WINNER BMW i3s

HIGHLY COMMENDED
JAGUAR I-PACE, MINI COOPER S

BMW's distinctive electric hatch dominated the voting here, thanks to its smooth, emissions-free running and excellent visibility.

Deputy digital ed Tom Morgan, who ran the car, summed it up well: "Short overhangs, great forward visibility and a raised driving position make placing the i3s incredibly easy." Road tester Ricky Lane added the torque-happy electric powertrain meant the car "goes like a whippet for gaps in traffic".

Jim Holder, Haymarket Automotive's dark overlord (well, his business card reads 'editorial director'), also highlighted how a "fancy spacious interior" helped boost its city car credentials.

Only two other cars scored any votes in this category. The Mini Cooper S was a predictable choice because, well, it's a Mini, but the Jaguar I-Pace? Matt Prior reasoned: "A massive SUV is the best city car there is, because a Hyundai i10 is, as often as not, stuck just like you are, but you're more comfortable."

Our Mini was a handy thing in tight spots

Fair points, well made. We doff our cap to Mr Prior, as he sits there, comfortably stuck in traffic.

THE 'PICK YOUR OWN' AWARDS

Other prizes we should hand out

DS 7 CROSSBACK
MARK TISSHAW
"The 'have another go' award, because it's supposed to bring 'Frenchness' to the luxury car world à la Cartier and Chanel. Except it's so far off those levels."

PEUGEOT 508
STEVE CROPLEY
"Because it shows a saloon can still be stylish."

McLAREN 720S
ANDREW FRANKEL
"For being the most broadly defined and capable supercar yet invented."

TALES OF THE UNEXPECTED AWARD

For the car that surprised us most (for whatever reason)

WINNER DS 7 CROSSBACK

HIGHLY COMMENDED
KIA E-NIRO, PEUGEOT 508

Is it possible for a category about the car that surprised us to have a surprise winner? Or perhaps that's the whole point. Either way, the DS 7 Crossback qualifies on all counts to take the class crown here. Jim Holder explained his vote: "On paper, these are Peugeot and Citroën underpinnings dressed up in a fancy frock, but I found myself quite charmed once I was settled in. I enjoyed the difference."

The premium-aping French charms of the big DS also won over Damien Smith. "I'm not a big fan of SUVs," he admitted, "but apart from the raised ride height it felt much like a Peugeot 508 GT."

Editor Mark Tisshaw championed the Kia e-Niro, saying: "It really is brilliant – and not the kind of brilliant you feel obliged to qualify with 'for a Kia'." A

USED CARS

What to buy, where to buy it and how much to pay

James Ruppert

THE HIGH PRIEST OF BANGERNOMICS

Hybrid Mondeo is off the radar but will make sense for some buyers

HUNTING DOWN HYBRIDS

Petrol-electric is growing in popularity on the used market

I notice that every quarter used car sales are on the up, according to the SMMT. At the three-quarter point of this year sales were up 0.9%, which equates to 6.1 million used cars. Interestingly, plug-in electric and hybrid models showed a solid increase of 13%, totalling 37,589 units and growing their share of sales to 1.8% from 1.6% over the same time last year. I must say I'm warming to hybrids and they are becoming unavoidable on the forecourt. Stats are all very well, of course, but what's available in the metal is much more impressive.

I have a thing for Mondeos and it's so easy to forget that there has been a hybrid one around for a good few years. At a largish nearby car supermarket there was a 2015 2.0 saloon in full-on Titanium specification, which includes leather seats and a rear-facing parking camera. Significantly, it didn't have a mega-mileage (like so many do) with just below 50,000 on the clock. So with zero annual road tax and an official 70mpg overall, £12,000 seems very reasonable indeed.

Infinitis are pretty forgettable too, and are leaving the showrooms for good, but they have Nissan hybrid running gear. As a luxury saloon, they tend to be rather anonymous but very well put together. An M35h GT in suitably generous Premium specification has everything you could possibly want. A 2013 saloon will deliver around 40mpg from its petrol/electric combo, and with 80,000 miles this fancy saloon will cost £9999. There are several upsides to running an Infiniti and I would highlight quality and exclusivity.

I seem to be in a hybrid saloon car enclave, which is great. With good economy and low or no tax, it's hard to think of anything better than a Mercedes-Benz S-Class. I came across a 2014 3.5 S400h SE Line L with lots of stuff to make the rear passengers super-comfy. So rear climate control, ventilated electric seating and sun blinds, while 44mpg is on offer along with £150 road tax, and all for £19,990. The 109k mileage isn't too bad and the service history is all stamped up, and no one smoked inside it apparently.

> "If you're doing the driving, the best saloon is a 5 Series"

Then again, if you're going to be doing the driving rather than sitting in the back, the best saloon in the world has to be a BMW 5 Series. A 2012 535 ActiveHybrid SE for £12,999 seems like a nice way to travel, and finding one with 'comfort' seats and nappa leather with 71,000 miles appeals – while 44mpg and £190 road tax are further sweeteners. I was interested that the dealer was offering a comprehensive three-year warranty for £895, which has to be worth doing with any complex modern car. Hopefully all these new hybrid buyers are ticking that box.

Infiniti's hybrid M35h is well built and gives 40mpg

WHAT WE ALMOST BOUGHT THIS WEEK

BMW 318i SE

This tidy, unpretentious 318i with 146,000 miles looks good value at £550. It's hard to tell if it has tin worm at this distance but the private seller claims not, so we'll hold them to that. The E46 had wonderful steering and a fine ride and handling balance. Shame it's not a six, but at least it'll be cheaper to run.

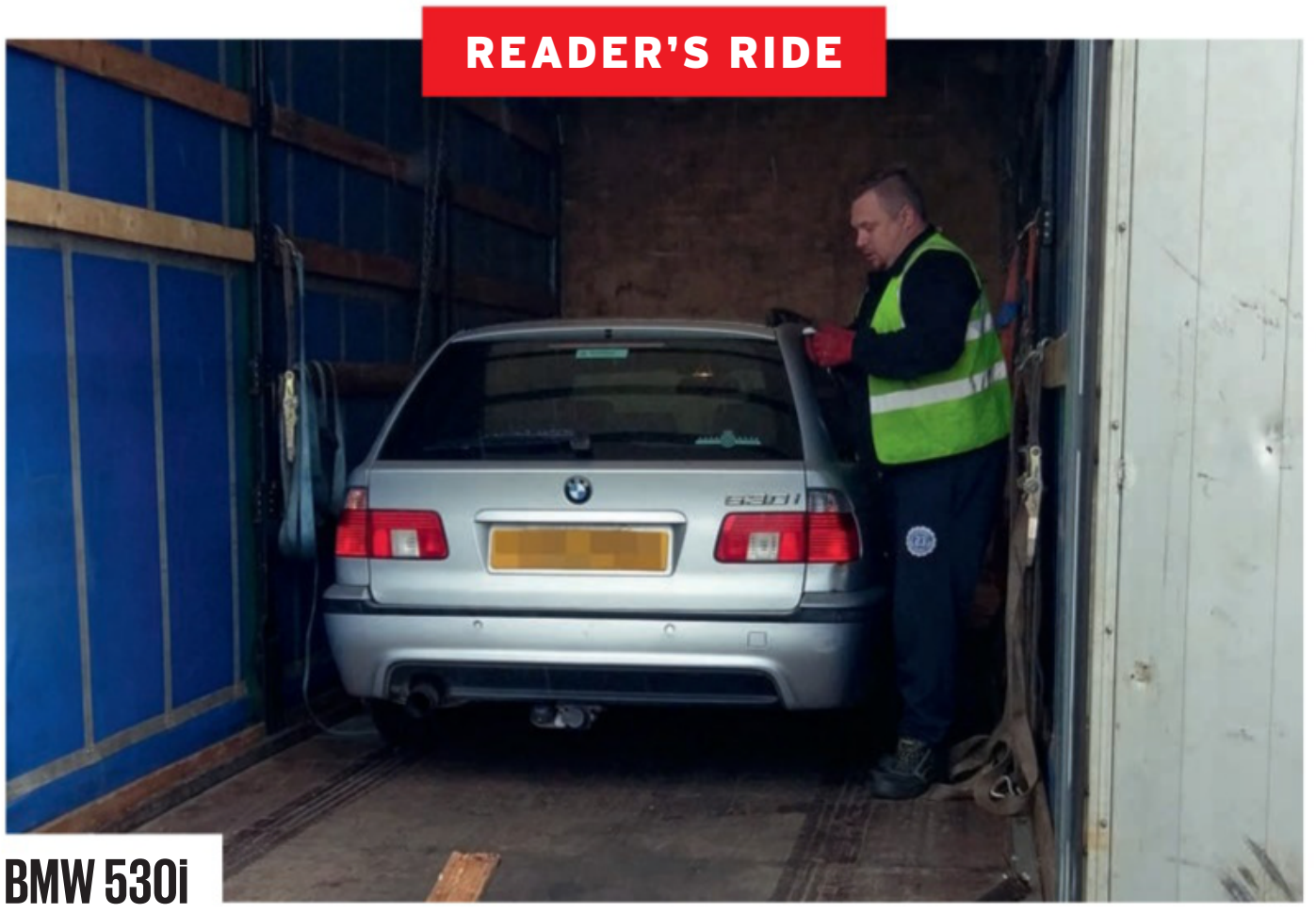
TALES FROM RUPPERT'S GARAGE

MILEAGE 83,752

BMW 320

At a time when most people are rightly squirrelling away their classics for winter, I'm digging in to make mine ready for a busy few days. Luckily it was simple enough for an idiot like me to do and make it tick over just a tad faster at 900rpm: I just took the air filter off, which was simple enough. Now it's not as hard to start as it has been. What I have learned is that I can't rush the Baby Shark. It's the one car I own that needs a good old-fashioned warming up. If I get stranded, I'll let you know.

READER'S RIDE



BMW 530i

Huge thanks to Andrew, who did that rare thing and shared one of those difficult moments we all have from time to time: selling a car. Still, the money stops us getting too emotional.

"Waved goodbye to our 530i this week, after seven years and 60k miles," he says. "It cost just £800 in depreciation. Reliable, cheap and easy to service and repair, it will be fondly remembered for years. Bought for long-distance holiday travel. It's off to Poland for a new life, so it's not just big diesels they're importing."

READERS' QUESTIONS

QUESTION I see scrappage allowances have made a comeback. Are they good value for money?

David Barnes, Sheffield

ANSWER If your old car really is on its last legs then perhaps there's some value in them, although all you're getting is the discount you'd have got on the new car had you pushed for it. If your old car is still in rude health we'd recommend selling it yourself beforehand, then getting the maximum discount on the new car. Better still, buy a pre-reg model: you'll find that if you go through an online seller you'll save an average of around £2600 compared with the price, including scrappage allowance, of the equivalent new model. **JE**

QUESTION I've recently become interested in fuel cell cars. A new vehicle is beyond my budget so I'm trying to find a used Hyundai iX35 FCEV. Can you help?

Mark Drury, via email

ANSWER It's not surprising you can't find a used ix35 FCEV since only 17 were sold and Hyundai UK still has five of them on its own fleet, where they serve as shuttle buses and support vehicles. The remaining 12 were a mix of lease and outright purchase, so as their warranties end and getting parts becomes harder, they'll come to market. Hyundai says it will sell its five examples one day, too, so keep your eyes peeled. **JE**

SEND YOUR USED CAR TALES TO ✉ james@bangernomics.com **AND READERS' QUESTIONS TO** ✉ autocar@haymarket.com

AS GOOD AS NEW

RENAULT CAPTUR

This small French SUV ticks a lot of boxes. **John Evans** takes a closer look

As this is written, Renault showrooms across the land are being emptied of their few remaining unregistered, old-model Capturs as the all-new version pushes at the gates. In fact, you can order the new Captur now for delivery in February.

Still, here we're interested in its predecessor, a model that did a sterling job in helping to establish the market for small SUVs when it was launched in 2013. Such was its popularity that in 2016 the Captur was Europe's best-selling small SUV.

When it first landed, reviewers complained about its poor ride on scarred roads, a tendency to lean heavily in corners, lacklustre performance and uncommunicative steering. To the model's fast-growing army of admirers, however, these were mere technicalities.

Instead they focused on its plus points: stylish looks (especially in one of the two-tone colour schemes), chunky presence, lofty driving position, space-efficient interior featuring a sliding rear bench, four years' servicing, warranty and breakdown cover, and keen pricing.

The model was facelifted towards the end of 2016 (restyled grille, smarter lights all round with LED daytime-running lights, improved interior trim) and then last year the line-up was simplified.

It's these post-2016 Capturs we're interested in here since they're almost indistinguishable from today's few remaining unsold ones. Prices start at £8000 for a 2017 0.9 TCe Expression with 23,000 miles, rising to around £19,000 for a pre-reg 1.3 TCe 150 GT Line EDC automatic with delivery mileage.

For a small car, there are lots of engines to choose from. If you spend your time pottering around town, lightly loaded, you'll be fine with the 89bhp 0.9 TCe 90 petrol. There's a more powerful 118bhp TCe 120 available with the EDC automatic gearbox. Later on, a choice of two 1.3-litre engines arrived: a 128bhp TCe 130 and 148bhp TCe 150, the latter also offered with the EDC 'box.

If you don't like the idea of diesel then one of these more powerful petrols would be a good choice, especially if you're contemplating long, fully loaded drives.

However, given the Captur's less than sparkling steering and handling abilities, don't expect to arrive grinning from ear to ear.

There are two diesel engines: a 108bhp dCi 110 and the 89bhp dCi 90. The former is a gutsy partner but it's the latter, the 89bhp unit, that survived the cull of 2018 and which is also available with the EDC gearbox. It's a clattery old thing but it'll give you the economy you're looking for and it bowls along happily enough.

Talking trims, up to 2018 Dynamic Nav and Dynamic S Nav were the big sellers thanks to their alloy wheels, climate control, chrome trim and media system. After that date, the trims changed to Play, Iconic, runout S Edition and GT Line, in that order. Iconic, a blend of Dynamic and Dynamic S, ticks most boxes.

TOP SPEC PICK

SIGNATURE X NAV

Signature S Nav was for a time the top spec but X Nav a rung below it gets our vote for having Renault's advanced Grip Xtend traction control system, in addition to luxury kit.

It's a small SUV but chunky looks give the Captur presence

FAST SALOONS BEST LEASE DEALS

ALFA ROMEO GIULIA 2.9 V6 QUADRIFOGLIO

£4373 deposit, £729 per month, 48 months, 8000 miles per year

Not as vocal as a Merc-AMG or as sharp through turns as a BMW M4, but this is the one we'd take – while turning a blind eye to its cheap-feeling interior.

MERCEDES-AMG E63 PREMIUM

£7919 deposit, £1320 per month, 48 months, 8000 miles per year

More power than you could possibly need, but then it wouldn't sound so heroic and nor would it go so fast (where permitted). It's a big saloon but you'll be surprised by its agility. Its quality is less surprising.

MERCEDES-AMG C63 S

£6252 deposit, £1042 per month, 48 months, 8000 miles per year

Here that AMG engine note is the soundtrack to an easy-to-drive super-saloon with sublime steering and a perfectly balanced chassis. Likes going sideways, too, as visitors to Mercedes Brooklands will know.

NEED TO KNOW

- Capturs registered up to 31 January last year were sold with a four-year/100,000-mile warranty, but from 1 February cover was trimmed to three years/60k miles.
- Look out for versions with Renault's Grip Xtend advanced traction control system that offers three modes: Road, Loose Ground and Expert. Coupled with optional all-weather tyres, it gives the little SUV a modicum of gentle off-roading ability.
- All Capturs were sold with a tyre inflation kit but it's worth keeping your eyes peeled for any that were specced with the optional spare wheel instead.
- Check wheel-arch trims fit snugly and that the digital radio works. A faulty stop/start system possibly indicates a tired battery.

OUR PICK

RENAULT CAPTUR 0.9 TCE 90 DYNAMIQUE S NAV

Lowest-powered Captur is ideal in town. Keeping it safe from scrapes are auto-folding mirrors and rear parking sensors.

WILD CARD

RENAULT CAPTUR 1.3 TCE 150 ICONIC EDC AUTO

Small autos can be frustrating but, in this Captur's case, the combination of powerful engine and responsive gearbox is a nice surprise. Iconic trim features a touchscreen sat-nav.

ONES WE FOUND

- 2016 Captur 1.5 dCi Dynamique Nav, 98,000 miles, £6500
- 2017 Captur 0.9 TCe Expression, 23,000 miles, £8000
- 2018 Captur 1.5 dCi Dynamique S Nav, 32,000 miles, £10,000
- 2019 Captur 1.3 TCe 130 Iconic, 10 miles, £15,000

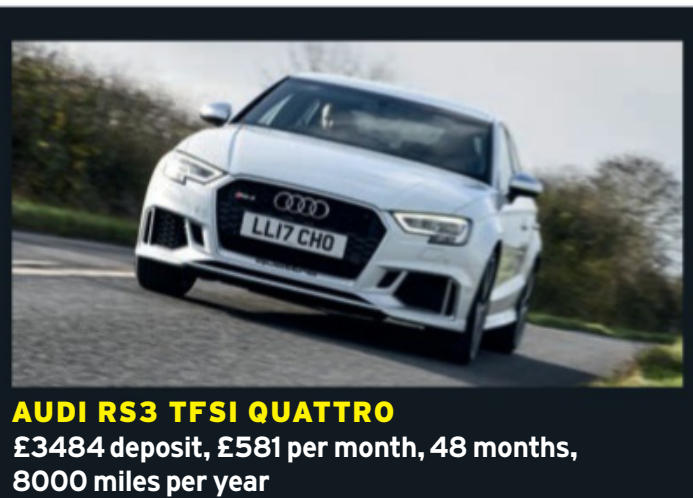
The Captur is capable enough but it's no driver's car

The cabin makes good use of space with a sliding rear bench seat

BMW M5

£5071 deposit, £845 per month, 48 months, 8000 miles per year

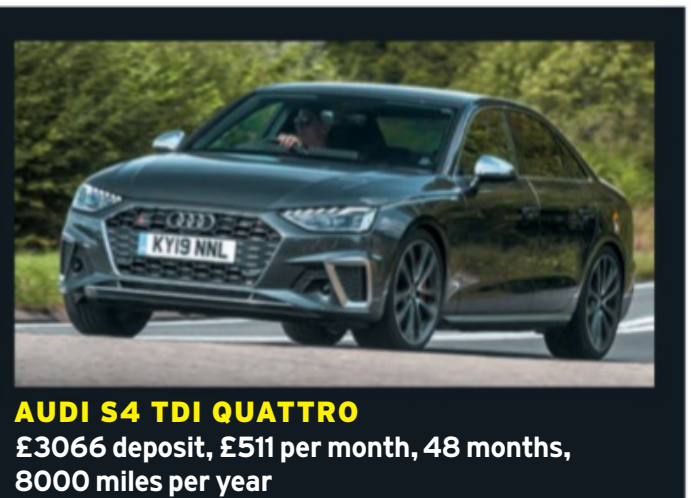
What it lacks in aural drama the M5 makes up for with astonishing all-weather traction, incredible straight-line performance and impeccable build quality. And for all its power, it's as easy to drive as a regular 5 Series.



AUDI RS3 TFSI QUATTRO

£3484 deposit, £581 per month, 48 months, 8000 miles per year

Audi's charismatic five-pot, grippy four-wheel drive and peerless build quality combine to create a sports saloon of real distinction. It's not the most fun you can have on four wheels but it's not far off it.



AUDI S4 TDI QUATTRO

£3066 deposit, £511 per month, 48 months, 8000 miles per year

The S4's hearty diesel is a perfect fit, while four-wheel drive keeps everything pointing the right way. The gearbox could be sharper, but cabin quality is all you'd expect. Just go easy on the options.

For more lease deals, visit whatcar.com

BUY THEM BEFORE WE DO

Citroën C6 2.7 HDi V6 Lignage £5995

"It's worth spending more for a well-cared-for C6 to avoid coming to grief." Not our words but those of the top techs at Wolsey House Motors, a Citroën specialist and purveyor of fine examples of the sumptuous C6 of 2006-12.

So with their advice ringing in our ears, we've ignored the 90,000-mile 2006-reg 2.7 HDi V6 Exclusive we found offered at £2750, passed quickly by the gaggle of similar motors huddled around £3500 and instead stopped for a closer look at this £5995 example.

It's a 2009 car, so a little younger than the rest, with a reasonable 80,000 miles. Better still, the trade seller has gone to the trouble of listing every service, including mileage, date carried out and type (major or minor). 'First to see will buy!' is the confident claim.

Looking at those services, the car's black leather interior, immaculate (at least in the pictures) black bodywork and gleaming 18in alloys, and imagining the near-silence of its double-glazed cabin, we can believe it.

But safety first, so best we recall WHM's tips for checking over these old French fancies. First off is the coolant system whose thermostat housing can crack and steel pipes corrode and leak. The automatic gearbox is another of those so-called 'sealed-for-life' affairs that should actually have had the occasional fluid change. The C6's trick suspension can store up all sorts of trouble, including corroded pipes and pipe ends. We'll check it sits level, too.

The body is a combination of steel and aluminium, so galvanic corrosion will be on our radar. Fingers crossed that the C6's party trick, its dynamic rear spoiler, rises and falls. And then it's just a question of checking that all the interior bells and whistles work.

JOHN EVANS

Datsun Stanza 1.8 5dr auto
£6000

Anything that survived the great 2009 scrappage massacre is worth our attention. Even this 1982 Datsun Stanza, with T-shaped auto shift lever and rich velour upholstery. The spacious, two-owner hatch has done only 28,000 miles and is immaculate.

Mazda CX-5 2.2TD SE-L AWD
£5495

The CX-5 was a minor revelation at launch. Here was an SUV that could ride and handle as well as it looked. Most were front drive but here's a rare 4x4 example: a one-owner 2013 car with 109,000 miles and full history. Handy if winter sets in.

Ford S-Max 2.5T Titanium
£4500

Before SUVs arrived, families used to travel in things called people carriers. Here's one that's even more unusual for being powered by the 2.5-litre five-cylinder petrol engine from the Focus ST, enabling it to accelerate from rest to 62mph in just 7.4sec.

Seat Leon Cupra 280 Sub8
£14,395

Sub8 references the model's sub-eight-minute dash around the Nürburgring in 2014. Seat created three Sub8 performance packs, but it's not clear which one this 51,000-mile 2015-reg five-door comes with. Either way, it'll do 0-62mph in 5.9sec.

AUCTION WATCH

RANGE ROVER 4.0 HSE AUTO

The P38 Rangie of 1994-2002 still looks reasonably fresh, and to think it was the successor to the original launched back in 1970. Here's one we saw pass through auction recently: a 2001-reg 4.0 HSE with 74,500 miles. It made £3282. Good Mk1s make much more but we'd have been happy with this P38 with its 4.0-litre V8, leather trim and electric sunroof. This engine is a safer bet than the 4.6 (it has cylinder liner problems), although both can suffer with dodgy cooling systems. We'd have checked that this example was sitting nice and level, too.

FUTURE CLASSIC

Toyota Yaris 1.8 GRMN Price £17,995

Never mind hybrid this and EV that, we'll look back on this period as the age of forced induction, which is why the Yaris GRMN is so interesting. It takes a slightly different route, eschewing a turbo for a supercharger – which means it thrives on revs and sounds fantastic. It looks good, too, with its race-inspired styling. Sadly, engine and bodykit can't disguise its slightly off-the-pace handling, but 10 years from now that small detail may not trouble enthusiasts keen to bag the few remaining examples of the 80 GRMNs that landed here.

CLASH OF THE CLASSIFIEDS

USED CAR DESK DOES BATTLE

BRIEF

Find me an interesting car from an obsolete brand for £5000.

Reliant Kitten DL £3000

Daimler XJ V8 4.0 £5000

MAX ADAMS The 1970s was a good time for Reliant. Some may not believe it, but it was actually the second-biggest British-owned car maker at the time. It had bought out its closest rival and was making all sorts of interesting models to appeal to new customers, including three-wheelers, vans, sports coupés and even this little Kitten, from 1976.

MARK PEARSON I think you'll find the 1970s was also a good time for Woolworths, and look at how things turned out for them. Well, I'm sorry but your pathetic plastic contraption is no match for my Jag...er, Daimler. It's a thing of beauty, for one, with a thumping V8. It's got power and performance and it's wonderfully luxurious. And you can add to that unmatched ride and refinement. Only 86,000 miles on this 1998 one and years younger than your jumped-up Robin.

MA Now look here, Pearson. Need I remind you that my Kitten does, in fact, have four wheels – one in each corner! Your Jaguar with extra chrome is a far cry from Daimlers like the SP 250, so I think you'll find that mine's more interesting.

MP I know which one of these two I'd rather take on a long journey. Or a short one, come to that. Your Kitten is nothing but a sour puss.

MA Très drôle.

VERDICT

The Daimler's chrome wing spats could be hiding rust, so I'll take the glassfibre Kitten. **JOHN EVANS**

HOW TO BUY A

PORSCHE 911 (993)

AIR APPARENT

The 993 was the last of the air-cooled 911s and remains coveted today, but you'll need to be on your guard when buying. **John Evans** investigates

Even in these uncertain times, one thing's for sure: an air-cooled Porsche 911 will always be desirable. The last of them was the '993' launched in 1993. It was replaced in 1998 by the 996, the first of the current generation of liquid-cooled 911s. The fact that this new model wasn't universally well received only served to boost the 993's appeal.

Besides its traditional air-cooled 3.6-litre flat-six engine, what also excited folk was the 993's wonderful build quality and its multi-link rear suspension, which (mostly) fixed those infamous handling jitters.

Today, prices start at around £30,000 for high-mileage, two-wheel-drive Carrera 2 cabriolets – the second version, following the C2 coupé, to be launched. Most have the four-speed Tiptronic automatic gearbox. Be warned, though: the cabrio tended to be bought by people who were less scrupulous about servicing, so tread carefully.

Saying that, a sound cabrio Tiptronic with a full service history will be a lovely thing to own and good value. You might even find a manual version, as we did: a 1995 example with 83,000 miles for £37,995 at Ashgood, a Porsche specialist.

Meanwhile, the more sought-after C2 coupé with six-speed manual 'box (a 911 first) is typically a good few thousand pounds more. In fact, the cheapest we found was a privately advertised 1995-reg with 80,000 miles for £53,950.

A good halfway house is a Targa manual. It's less popular than the coupé, so cheaper, but check that the sliding glass roof works because repairs can be expensive. It was launched a couple of years after the C2 in 1995 and has the Varioram variable intake system that became standard across the 993 range from 1996. It raises the 3.6's power from 268bhp to 282bhp.

The Carrera 4 coupé and cabriolet, with four-wheel drive, landed in 1995. It's a more complex machine, but while purists rate the C2 more, they'll look on enviously as you speed away in the rain. These C2 and C4 coupés and cabrios, pre- and post-Varioram, are the bread and butter of the 993 range.

In 1995, things got more serious with the launch of the lightweight 296bhp 911 RS and the wide-bodied, four-wheel-drive Turbo. The latter's twin blowers raised the 3.6-litre engine's output to 402bhp (a later variant, badged the Turbo S, made 426bhp). The GT2 with rear-wheel drive made even more: 444bhp. Back to the real world, and in 1996 those who couldn't stretch to the Turbo could have a four-wheel-drive Carrera 4S with the Turbo's bodykit, brakes and suspension, or a rear-drive C2S with the bodykit alone.

Today, the Turbo, Turbo S, RS and GT2 prices are off the scale, but with values softening across the board, now might be a good time to bag a cheaper C2 or C4 cabrio Tiptronic or, at a pinch, a C2 coupé while folk are looking the other way.

It's worth checking for damp cabin carpets in cabriolets and Targa versions

Power outputs of the 993 went from 268bhp for a C2 to 444bhp for the full-fat GT2

> "A sound cabrio Tiptronic with a full service history will be a lovely thing to own"

HOW TO GET ONE IN YOUR GARAGE

An expert's view

PAUL O'REILLY, GENERAL MANAGER, ASHGOOD

"We've sold six 993s in the past four weeks, from a £30,000 C2 Tiptronic to a £300,000 Turbo S. The prices of some versions have softened, though. We've just sold a left-hand-drive 3.8 RS for £200,000; a couple of years ago, we got 15% more for the same car. It's all about numbers: the fewer there are, the more they're worth. There were only 23 right-hand-drive Turbo Ss and some will have been written off. If you've got the money, there's a 993 for you whether it's a coupé, cabriolet, automatic, turbo or race-inspired."

Buyer beware

ENGINE

Oil must be kept at the right level and changed every 12,000 miles. Check after a test drive. Also, check the oil temp gauge: if the reading is too high, it may indicate issues with the oil cooler or temperature sensor. Look for leaks from the chain, valve and lower cam covers. Smell for leaking oil burning on the heat exchangers. If it's over 100k miles, the engine may have been rebuilt; check by whom. With little-used cars, check for missed services, uneven running and perished hoses.

EXHAUST

Check for rust on the heat shields and silencer welds, and if the system has been upgraded that it satisfies emissions and noise regs.

GEARBOX

Manual gearbox thrives on scheduled oil changes. Clutch should be good for 70,000 miles. Regarding the Tiptronic, a noisy torque converter is bad news.

BRAKES AND SUSPENSION

Check discs faces for pitting and edges for lipping. Suspension bushes last 40k miles or so. New ones plus new dampers and ball joints tighten the car nicely.

BODY

Rust takes hold around the headlights, front and rear screens, rear chassis legs, rear bumper support brackets, the scuttle and front wings. Check the door straps aren't broken.

INTERIOR

If the heating system is struggling, check the heat exchangers are working. Air-con problems may be a failed resistor but a new system is very expensive. Feel for damp carpets.

Also worth knowing

Consider getting your potential buy inspected. Porsche Inspections (porscheinspections.com) charges £410 but it could more than pay for itself in a renegotiated buying price or money saved *not* buying that 993 money pit.

How much to spend

£28,000-£34,999

Launch to 1996 C2 cabrios, autos and manuals. Miles over 100k, some full service history.

£35,000-£39,999

Mainly auto coupés and cabrios but now including Varioram cars. Mileages getting lower from around £38,000.

£40,000-£49,999

More Varioram C2s and C4s, mileages around 80,000.

£50,000-£59,999

Pick of some excellent C2s and C4 coupés but still with around 80k miles.

£60,000-£84,999

The best C2s and C4s.

£85,000-£99,999

Turbos and specials.

£100,000 AND ABOVE

Rarities from here up to £350,000.

One we found

PORSCHE 911 (993) TARGA, 1996/N-REG, 137,000 MILES, £33,990

This example's standout feature is its full history: 23 stamps in the book with supporting invoices, many carried out by official Porsche centres, a few by specialists. Check the Targa roof works.

Thanks to Paul O'Reilly (ashgood.co.uk), porscheclubgb.com and revolution-porsche.co.uk

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ROAD TEST RESULTS

Facts, figures, from the best road tests

No one produces as thorough a judgement on a new car as Autocar. As well as acceleration, braking, fuel economy and noise tests, we carry out benchmark limit-handling tests, setting lap times if appropriate. But we don't just drive at the track, essential as it is for finding the limits of performance. We also drive on a wide range of roads. Where we have tested more than one model in a range, the rating is for the range overall. Where a model within the range meets our coveted five-star standard, it is highlighted in yellow.

» **30-70MPH** Indicates overtaking ability through the gears.

» **50-70MPH** Recorded in top gear (*kickdown with an automatic) and demonstrates flexibility.

» **FUEL ECONOMY** Figures quoted are the average and touring fuel economy as tested. The touring figure is representative of a 70mph cruise on a typical UK motorway. For electric cars, the figures quoted are for the same average and touring test schedules but are expressed in miles per kWh†. **Denotes mpkg (miles per kilogram) for hydrogen-powered fuel cell vehicles.

» **BRAKING 60-0MPH** Recorded on a high-grip surface at a test track.

» **MPH/1000RPM** Figure is the speed achieved in top gear.

Make and model	Top speed	0-60mph	0-100mph	30-70mph	50-70mph	Braking 60-0mph	Power (bhp)	Torque (lb ft)	Mph/1000rpm	Mpg or equivalent; test average/ touring	Weight (kg)	TEST DATE
ALFA ROMEO												
Giulia 4dr saloon ★★★★½												
Quadrifoglio	190	4.5	9.2	3.2	10.3	2.57	503	443	38.7	34/49	1580	29.3.17
Stelvio 5dr SUV ★★★½☆												
2.2D 210 Milano	134	6.8	20.6	7.0	7.3	3.01	207	347	41.3	38/50	1659	3.1.18
Quadrifoglio	176	4.0	9.4	3.3	5.9	3.31	503	443	36.4	22/32	1931	9.1.19
4C 2dr coupé/convertible ★★★☆☆												
Spider	160	5.1	12.4	4.0	5.8	2.97	237	258	29.6	32/44	940	27.1.16
ALPINA												
B3 Biturbo 4dr saloon ★★★★½												
B3 Biturbo	155	4.7	10.3	3.8	6.8	2.9	404	443	41.5	27/35	1610	29.8.13
ALPINE												
A110 2dr coupé ★★★★★												
Premiere Edit'n	155	4.7	10.8	3.8	6.5	2.6	248	236	28.1	28/46	1103	16.5.18
ARIEL												
Atom 4 Odr open ★★★★★												
4	162	3.2	6.9	2.4	3.5	2.59	316	310	24.5	27/39	680	9.10.19
Nomad Odr open ★★★★★												
Nomad	125	4.5	12.7	3.9	7.7	3.10	235	221	26.7	–/–	735	24.6.15
ASTON MARTIN												
Vantage 2dr coupé ★★★★½												
V8	195	3.7	8.3	3.0	10.5	2.7	503	505	42.6	18/25	1720	23.5.18
DB11 2dr coupé ★★★★½												
Launch Edition	200	4.0	8.4	3.0	10.1	2.6	600	516	46.2	24/34	1910	21.9.16
Rapide 4dr saloon ★★★★☆												
Rapide S	190	5.3	11.3	4.3	8.3	3.0	550	457	33.6	19/23	1990	20.3.13
DBS Superleggera 2dr coupé ★★★★★												
DBS Superl'era	211	3.7	7.4	2.7	9.5	2.5	715	664	42.7	19/26	1910	21.11.18
AUDI												
A1 Sportback 5dr hatch ★★★½☆												
35 TFSI S line	137	7.9	22.0	8.4	8.6	2.7	148	184	27.6	38/57	1209	2.10.19
A3 4dr saloon/3dr/5dr hatch ★★★★☆												
RS3 Saloon	155	4.0	9.9	3.5	9.0	2.7	394	354	33.7	29/35	1515	6.9.17
A4 4dr saloon/5dr estate ★★★★☆												
2.0 TDI S line	147	8.4	22.2	7.3	11.2	3.1	187	295	37.1	45/50	1940	4.11.15
S4 TDI	155	4.6	11.5	4.1	–	2.87	342	516	50.2	29/54	1871	18.9.19
RS4 Avant	155	4.0	9.6	3.5	11.0	3.0	444	443	38.4	24/37	1790	14.2.18
A5 2dr coupé/convertible ★★★½☆												
S5	155	4.9	11.7	4.4	9.7	3.0	349	369	40.5	26/33	1615	11.1.17
A5 Sportback 4dr saloon ★★★½☆												
2.0 TFSI S line	155	5.7	15.1	5.3	17.2	2.5	249	273	42.2	30/41	1535	8.3.17
A6 4dr saloon/5dr estate ★★★★☆												
40 TDI S l'e Avant	149	8.4	22.6	7.5	–	3.1	201	295	51.0	39/50	1710	14.11.18
A7 Sportback 5dr hatch ★★★½☆												
50 TDI Sport	155	5.8	14.9	5.3	–	2.8	282	457	49.0	29/53	1880	11.7.18
TT 2dr coupé/convertible ★★★★☆												
RS	155	3.6	8.4	3.0	7.8	2.7	394	354	35.1	27/37	1440	7.12.16
E-tron 5dr SUV ★★★★½												
55 quattro	124	5.4	13.7	4.2	2.5*	2.91	403	490	–	2.3/2.9†	2569	26.6.19
Q2 5dr SUV ★★★★☆												
1.4 TFSI Sport	132	8.1	23.9	8.2	9.8	2.7	148	184	29.4	45/56	1265	9.11.16
SQ2 quattro	155	4.5	11.6	4.1	9.2	2.72	296	295	33.4	27/35	1530	20.3.19
Q5 5dr SUV ★★★★☆												
2.0 TDI S line	135	8.3	26.4	8.5	14.7	3.1	187	295	42.0	37/43	1770	15.3.17
SQ5 quattro	155	5.5	13.7	5.0	11.1	2.6	349	369	45.2	26/32	1870	21.6.17
Q7 5dr SUV ★★★★☆												
SQ7 4.0 TDI	155	5.1	12.6	4.4	7.0	2.9	429	664	47.6	24/38	2330	26.10.16
Q8 5dr SUV ★★★★☆												
50 TDI S Line	152	6.9	19.1	6.6	10.1	2.8	282	443	44.9	29/40	2285	26.9.18
R8 2dr coupé ★★★★☆												
V10 Plus	205	3.1	6.7	2.6	5.7	2.8	602	413	26.8	15/23	1555	30.12.15
BENTLEY												
Continental GT 2dr coupé ★★★★½												
W12 First Edition	207	3.6	8.1	2.9	8.9	2.8	626	664	52.4	20/26	2244	2.5.18
Mulsanne 4dr saloon ★★★★☆												
6.75 V8	184	5.7	13.7	4.8	2.8*	2.6	505	752	44.8	18/21	2745	21.9.11
Bentayga 5dr SUV ★★★★★												
W12	187	4.9	11.6	4.4	8.7	3.0	600	664	48.2	20/25	2440	18.5.16
BMW												
1 Series 5dr hatch ★★★★☆												
118i M Sport	132	8.2	24.2	7.9	13.9	2.75	138	162	–	37/53	1431	30.10.19
2 Series 3dr coupé/convertible ★★★★½												
220d C'vble	140	8.5	24.7	8.4	9.0	2.1	187	295	34.5	50/53	1610	1.4.15
M2	155	4.4	10.3	3.6	6.2	2.6	365	343	33.7	31/37	1595	15.6.16
2 Series Active Tourer 5dr MPV ★★★★☆												
218d Luxury	129	8.9	26.5	8.7	12.1	3.0	148	243	40.4	42/56	1450	24.12.14
3 Series 4dr saloon/5dr estate/5dr hatch ★★★★½												
320d M Sport	149	6.9	19.8	6.8	13.2	2.54	188	295	43.0	47/63	1639	15.5.19
330e M Sport	140	6.3	15.7	5.7	6.9	2.9	249	310	40.8	40/47	1660	4.10.17
4 Series 2dr coupé ★★★★☆												
435i M Sport	155	5.5	13.2	5.2	6.3	2.7	302	295	28.2	28/37	1585	18.9.13
M4	155	4.1	8.8	3.2	6.1	2.4	425	406	34.0	29/36	1585	9.7.14
5 Series 4dr saloon/5dr estate ★★★★½												
520d M Sport	146	7.4	21.3	7.4	14.3	2.7	188	295	42.2	40/52	1635	31.5.17
M5	155	3.3	7.5	2.7	8.9	3.1	591	553	41.1	22/28	1855	18.4.18
6 Series GT 5dr hatch ★★★½☆												
630d xDrv M Spt	155	5.9	15.7	5.4	7.6	2.8	261	457	50.2	40/54	1880	8.11.17
7 Series 4dr saloon ★★★★☆												
730Ld	153	6.4	17.1	6.0	8.2	3.1	261	457	50.2	40/49	1795	11.11.15
8 Series 2dr coupé ★★★★☆												
840d xDrive	155	5.0	12.8	4.6	8.6	3.05	315	501	46.5	40/49	1901	16.1.19
i3 5dr hatch ★★★★☆												
1.3S Range Ext	99	7.7	–	6.6	4.0*	3.0	181	199	–	2.6/34†	1385	21.2.18
i8 2dr coupé ★★★★½												
i8	155	4.5	10.6	3.7	3.3	2.8	357	420	33.3	50/40	1560	17.9.14
X1 5dr SUV ★★★★☆												
xDrive20d xLine	136	8.2	24.2	8.0	11.8	2.8	187	295	35.1	43/49	1625	14.10.15
X2 5dr SUV ★★★½☆												
M35i	155	5.0	12.7	4.5	11.1	2.74	302	332	37.4	31/42	1668	25.9.19
X3 5dr SUV ★★★★☆												
xDrive20d M Spt	132	8.3	26.6	8.6	17.5	3.3	188	295	41.2	37/49	1825	17.1.18
X4 5dr SUV ★★★☆☆												
M Competition	155	4.0	9.1	3.3	20.1	2.65	503	443	43.3	23/29	2028	13.11.19
X5 5dr SUV ★★★★☆												
xDrive30d M Spt	143	6.6	18.9	6.6	15.1	3.36	261	457	47.1	35/43	2279	2.1.19
M	155	4.2	9.8	3.5	10.2	2.8	567	553	42.3	21/26	2350	13.5.15
CATERHAM												
Seven 2dr roadster ★★★★☆												
620S	145	3.8	9.2	3.2	5.7	2.7	310	219	21.2	25/29	610	9.3.16
CHEVROLET												
Corvette 2dr coupé ★★★★☆												
Stingray	181	4.4	9.4	3.3	11.7	2.3	460	465	48.4	22/33	1539	8.10.14
CITROEN												
C3 5dr hatch ★★★½☆												
P'tech 110 Flair	117	9.6	36.6	9.4	10.5	2.6	109	151	27.0	47/62	1050	28.12.16
C3 Aircross 5dr hatch ★★★½☆												
P'tech 110 Flair	115	11.5	36.4	10.7	12.3	3.5	109	151	27.5	35/39	1159	7.3.18
C4 Cactus 5dr hatch ★★★☆☆												
1.6 BlueHDi 100	114	11.8	41.2	11.7	7.2	2.9	99	187	36.1	47/62	1225	16.7.14
C5 Aircross 5dr SUV ★★★½☆												
BlueHDi 180	131	9.0	25.6	8.5	–	2.83	174	295	40.1	37/48	1540	13.2.19
CUPRA												
Ateca 5dr SUV ★★★½☆												
2.0 TSI 4Drive	153	4.9	12.3	4.4	9.4	3.03	296	295	33.8	29/37	1615	23.1.19
DACIA												
Sandero 5dr hatch ★★★☆☆												
1.2 75 Access	97	15.3	–	17.6	23.0	3.0	74	79	20.3	32/38	941	27.2.13
Duster 5dr hatch ★★★★☆												
SCe 115 Comfort	107	13.1	–	12.5	23.9	2.9	113	115	24.0	37/42	1179	22.8.18
DALLARA												
Stradale Odr roadster ★★★★½												
Stradale	165	3.7	9.2	3.4	3.1	2.39	395	369	26.4	26/30	987	16.10.19
DS												
3 5dr hatch ★★★½☆												
BlueHDi 120	118	9.9	32.2	9.4	11.1	3.1	118	210	36.4	59/67	1150	23.3.16
3 Crossback 5dr SUV ★★★☆☆												
Puretech 155	129	8.8	24.6	8.3	14.9	2.90	153	177	32.7	41/49	1205	10.7.19
4 Crossback 5dr hatch ★★★☆☆												
BlueHDi 120	117	12.0	48.8	12.3	18.0	2.9	118	221	36.7	49/50	1290	6.1.16
7 Crossback 5dr SUV ★★★½☆												
Puretech 225	141	8.6	20.2	7.0	15.1	2.9	221	221	34.0	35/45	1425	19.9.18
FERRARI												
488 GTB 2dr coupé ★★★★★												
488 GTB	205	3.0	5.9	2.0	3.7	2.43	661	561	28.9	–/–	1525	25.5.16
488 Pista	211	2.8	5.6	2.0	4.8	2.34	710	568	28.9	17/26	1465	7.8.19
812 Superfast 2dr coupé ★★★★☆												
F12 Berlinetta	211	3.1	6.2	2.2	4.9	2.6	789	530	30.0	–/24	1630	25.7.18
FIAT												
Panda 5dr hatch ★★★★½												
4x4 Twinair	103	14.6	–	15.8	16.0	3.0	84	107	20.8	37/44	1050	17.4.13
500 3dr hatch ★★★★☆												
Abarth 595	130	7.5	20.1	6.4	7.0	2.8	158	170	23.9	34/39	1035	26.2.14
Tipo 5dr hatch ★★½☆☆												
1.6 M'jet Lounge	124	9.6	31.6	9.8	8.7	2.9	118	236	35.0	49/62	1295	2.11.16
Abarth 124 Spider 2dr roadster ★★★★☆												
124 Spider	144	6.8	18.6	6.5	6.5	2.8	168	184	25.2	35/45	1060	22.3.17
FORD												
Fiesta 3/5dr hatch ★★★★☆												
1.0T Ecoboost	122	9.6	28.1	9.6	13.2	3.2	123	125	29.3	42/52	1147	9.8.17
Fiesta ST 3/5dr hatch ★★★★½												
ST-3 1.5 T Ecb'st	144	6.6	16.2	5.7	6.4	2.7	197	214	26.0	38/48	1187	15.8.18
Focus 5dr hatch ★★★★½												
1.5 Ecob't 182PS	138	8.9	22.8	7.8	10.0	2.35	180	177	26.9	30/44	1417	20.2.19
ST	155	6.1	14.1	4.9	6.1	2.70	273	310	27.2	32/41	1433	11.9.19
RS	165	5.3	13.9	5.3	6.9	3.5	345	325	27.3	28/37	1599	4.5.16
S-Max 5dr MPV ★★★★☆												
2.0 TDCi T'ium	123	10.5	32.0	10.4	13.9	2.5	148	258	39.5	44/46	1725	26.8.15
Mondeo 4dr saloon/5dr/estate ★★★★☆												
2.0 TDCi	130	10.0	28.8	9.4	12.7	3.1	148	258	38	53/56	1597	14.1.15
Mustang 2dr coupé ★★★★☆												
5.0 V8 GT F'back	155	5.2	11.6	4.2	9.4	2.7	410	391	35.1	19/25	1720	24.2.16
Bullitt	155	5.2	11.2	4.1	10.7	2.7	453	390	37.4	21/33	1782	5.12.18
Ecosport 5dr SUV ★★½☆☆												
1.5 TDCi	99	14.3	–	–	15.2	14.4	2.7	89	151	28	39/48	1384	3.9.14
Kuga 5dr SUV ★★★★☆												
2.0 TDCi	122	10.9	44.2	11.8	7.4	2.6	161	251	31.6	34/39	1707	13.3.13
Ranger 4dr pick-up ★★★★☆												
Raptor	106	10.5	37.7	10.5	–	3.46	210	367	41.1	24/33	2516	28.8.19
HONDA												
Civic 5dr hatch ★★★★☆												
1.5 i-VTEC Turbo	126	7.8	19.3	7.0	8.7	2.7	180	177	26.6	39/49	1357	19.4.17
2.0 Type R GT	169	5.7	12.5	4.4	6.1	2.8	316	295	25.4	29/43	1380	25.10.17
Clarity FCV ★★★★☆												
Clarity FCV	104	9.0	29.2	8.3	5.3*	2.9	174	221	na	51/72**	1872	12.7.17
CR-V 5dr SUV ★★★½☆												
1.5T EX CVT AWD	124	9.2	26.1	8.4	5.2*	3.3	190	179	39.5	32/38	1669	7.11.18
NSX 2dr coupé ★★★★½												
NSX	191	3.3	7.3	2.6	4.3	2.7	573	476	35.8	25/32	1725	5.10.16
HYUNDAI												
i10 5dr hatch ★★★½☆												
1.0 SE	96	14.7	–	16.2	19.9	2.9	65	70	20.0	44/51	925	29.1.14
i20 5dr hatch ★★★★☆												
1.4 SE	114	12.2	42.4	12.1	17.3	3.0	99	99	21.8	43/54	1060	7.1.14
i30 5dr hatch/estate ★★★½☆												
i30 N	155	6.4	14.8	5.6	6.1	3.1	271	260	27.4	31/43	1478	27.12.17
1.4 Premium SE	129	9.5	28.9	9.7	10.9	2.7	138	178	28.1	39/49	1423	13.9.17
Kona Electric 5dr SUV ★★★★☆												
64kWh P'm SE	104	6.7	17.4	5.8	3.5*	3.1	201	291	–	3.7/4.0†	1734	31.10.18
Santa Fe 5dr SUV ★★★½☆												
2.2 CRDi P'm SE	127	9.3	26.4	9.8	–	2.78	197	325	40.2	38/51	2003	6.3.19
Nexo 5dr SUV ★★★½☆												
Nexo	111	9.6	38.5	9.7	6.1*	2.88	161	291	–	42/60**	1852	12.6.19
JAGUAR												
F-Type 2dr convertible/3dr coupé ★★★★½												
V8 S Convertible	186	4.0	9.4	3.4	8.0	2.8	488	460	46.8	19/29	1655	12.6.13
V6 S Coupé	171	4.9	12.1	4.2	12.7	2.7	375	339	36.2	24/33	1594	11.6.14
2.0 Coupé R-Dy	155	5.8	14.7	5.1	9.5	2.8	296	295	33.2	31/44	1640	22.11.17
XF 4dr saloon/5dr estate ★★★½☆												
R-Sport 2.0	136	9.4	26.1	9.0	16.1	2.9	178	317	44.1	47/56	1595	2.12.15
S'brake 300 R-S	155	6.6	16.8	6.2	10.6	2.81	296	295	44.1	24/37	1727	17.4.19
XE 4dr saloon ★★★★½												
R-Sport 2.0	147	7.6	19.0	6.9	13.3	2.7	197	206	33.8	30/49	1530	1.7.15
XJ 4dr saloon ★★★★☆												
3.0d LWB	155	6.3	16.5	6.6	3.6*	2.7	271	443	43.5	28/36	1960	9.6.10
E-Pace 5dr SUV ★★★½☆												
D180 AWD SE	127	9.9	30.9	10.5	14	3.6	178	317	45.8	36/49	1843	11.4.18
F-Pace 5dr SUV ★★★★☆												
2.0d AWD	129	9.2	30.9	9.7	7.4	–	178	317	41.3	37/40	1775	11.5.16
SVR	176	4.1	9.3	3.5	10.4	2.69	542	502	41.6	18/29	2070	24.7.19
I-Pace 5dr SUV ★★★★½												
EV400 S	124	4.5	11.0	3.5	2.0	2.8	394	512	–	1.8/2.4†	2133	12.9.18
JEEP												
Compass 5dr 4x4 ★★★☆☆												
2.0 M'jet 4x4 L'd	118	11.0	39.0	11.4	10.9	2.8	138	258	34.2	38/45	1540	3.10.18
Renegade 5dr 4x4 ★★★½☆												
2.0 M'jet 4x4 L'd	113	10.8	37.6	11.2	10.0	3.5	138	258	34.0	41/53	1502	28.10.15
Wrangler 5dr 4x4 ★★★★☆												
2.2 M'Jet-II Ov'd	112	9.0	29.9	9.1	–	2.37	197	332	38.3	29/38	2044	10.4.19
KIA												
Stinger 4dr saloon ★★★½☆												
2.0 T-GDI GT-L S	149	7.4	18.2	6.4	10.9	2.9	244	260	36.7	32/43	1717	25.4.18
Rio 5dr hatch ★★★½☆												
1.0 T-GDI 3 Eco	115	10.0	37.0	10.5	12.3	3.2	99	127	27.1	40/50	1228	1.3.17
Ceed 5dr hatch ★★★½☆												
1.6 CRDi 115 2	119	9.9	30.8	9.6	15.3	2.9	113	207	41.4	50/70	1388	29.8.18
Proceed 5dr shooting brake ★★★½☆												
1.4 T-GDi	127	9.5	28.1	8.9	13.2	2.87	138	179	24.1	34/43	1475	27.2.19
Xceed 5dr crossover ★★★½☆												
1.4 T-GDi	124	9.3	28.8	8.7	12.3	3.55	138	179	31.7	35/47	1452	20.11.19
Niro 5dr SUV ★★★½☆												
1.6 GDI DCT 2	101	9.7	30.0	9.5	12.8	3.5	139	108/125	31.9	49/50	1500	31.8.16
e-Niro First Ed'n	104	7.2	19.0	–	3.7*	2.70	201	291	–	3.5/3.6†	1776	1.5.19
Sportage 5dr SUV ★★★½☆												
1.7 CRDi ISG 2	109	12.1	46.4	13.1	16.8	3.3	114	207	34.4	50/51	1500	2.3.16
Sorento 5dr 4x4 ★★★½☆												
2.2 CRDi KX-4	128	9.3	28.6	9.4	5.7*	–	197	325	35.2	35/39	1953	8.4.15
LAMBORGHINI												
Huracán 2dr coupé ★★★★½												
Performante	201	2.9	5.9	2.0	4.9	3.0	630	442	24.5	17/22	1382	11.10.17
Aventador 2dr coupé ★★★★☆												
SVJ	217	2.9	6.1	2.2	5.0	2.65	759	531	33.7	12/21	1770	19.6.19
Urus 5dr SUV ★★★★☆												
Urus	190	3.3	7.8	2.8	–	2.70	641	627	43.0	19/29	2285	3.7.19
LAND ROVER												
Discovery Sport 5dr SUV ★★★★½												
TD6 HSE Luxury	130	8.7	27.7	8.7	8.9	3.4	254	443	37.1	26/34	2230	12.4.17
Range Rover 5dr SUV ★★★★½												
4.4 SDV8	135	7.0	19.0	6.7	3.8*	2.9	334	516	41.8	25/35	2625	12.12.12
Range Rover Velar 5dr SUV ★★★½☆												
D240 HSE	135	9.3	27.4	9.0	15.7	3.8	237	369	41.8	33/48	2089	30.8.17
Range Rover Sport 5dr SUV ★★★★½												
3.0 TDV6	130	7.8	22.5	7.5	12.2	3.1	255	442	43.1	33/42	2115	2.10.13
SVR	162	4.4	10.3	3.8	12.6	2.6	542	502	41.8	22/19	2335	15.4.15

ROAD TEST RESULTS

Make and model	Top speed	0-60mph	0-100mph	30-70mph	50-70mph	Braking 60-0mph	Power (bhp)	Torque (lb ft)	Mph/1000rpm	Mpg or equivalent; test average/touring	Weight (kg)	TEST DATE
LEXUS												
LC 2dr coupé ★★★★☆												
LC500 Sport+	168	5.2	11.3	4.2	12.0	3.1	471	398	60.6	27/39	1970	18.10.17
NX 5dr SUV ★★★☆☆												
300h	112	9.7	30.4	9.1	5.6*	2.7	194	na	–	32/38	1905	1.10.14
RC F 2dr coupé ★★★☆☆												
RC F	168	4.8	10.7	3.9	12.9	2.9	471	391	39	24/28	1765	18.2.15
ES 4dr saloon ★★★½☆												
300h Takumi	112	8.7	21.8	7.6	4.6*	2.91	215	na	–	42/49	1742	6.2.19
LS 4dr saloon ★★★☆☆												
500h Prem AWD	155	5.9	15.4	5.3	12.4	2.8	295	258	36.9	30/42	2380	6.6.18
LOTUS												
Elise 2dr roadster ★★★½☆												
Cup 250	154	4.7	11.9	4.5	7.2	2.5	243	184	24.7	27/32	920	29.6.16
Evora 2dr coupé ★★★★☆												
Evora S 2+0	172	4.5	11.3	4.0	6.8	2.4	345	295	34.8	21/26	1430	30.3.11
Exige S 2dr coupé ★★★★½												
Exige S	170	4.1	9.6	3.7	5.5	2.5	345	295	27	21/30	1176	3.4.13
MASERATI												
Ghibli 4dr saloon ★★★½☆												
Diesel	155	6.5	17.2	6.0	5.1	2.7	271	443	43.3	31/40	1835	12.3.14
Levante 5dr SUV ★★★☆☆												
Diesel	143	6.8	19.9	6.9	4.3	3.4	271	443	46	26/42	2205	30.11.16
S Granlusso	164	5.1	12.7	4.5	–	2.73	424	478	39.8	16/24	2232	8.5.19
MAZDA												
2 5dr hatch ★★★★☆												
1.5 Sky'v-G SE	114	10.4	38.0	7.0	20.2	3.1	89	109	27.9	51/55	1050	22.4.15
3 4dr saloon/5dr hatch ★★★★☆												
2.0 Skyactiv-X	134	9.1	24.7	9.1	14.7	2.89	177	165	29.1	40/57	1425	6.11.19
MX-5 2dr roadster ★★★★½												
1.5 SE-L Nav	127	8.4	24.8	7.9	14.7	3.3	129	111	24.5	46/49	1050	2.9.15
CX-3 5dr SUV ★★★½☆												
1.5D SE-L Nav	110	10.3	34.7	10.3	10.3	–	104	199	34.8	59/60	1275	22.7.15
CX-5 5dr SUV ★★★★☆												
2.2D Sport Nav	127	9.4	26.3	9.1	10.4	3.0	148	280	37.0	43/53	1594	28.6.17
McLAREN												
570S 2dr coupé ★★★★★												
3.8 V8	204	3.1	6.4	2.2	10.2	2.6	562	443	36.5	23/37	1440	30.3.16
600LT Spider 2dr convertible ★★★★½												
3.8 V8	201	2.9	6.1	2.1	–	2.52	592	457	36.5	17/30	1404	22.5.19
720S 2dr coupé ★★★★★												
4.0 V8	212	2.9	5.6	2.0	7.7	2.4	710	568	35.4	19/24	1420	24.5.17
Senna 2dr coupé ★★★★★												
4.0 V8	208	3.1	5.5	1.9	8.0	2.4	789	590	35.7	16/25	1345	10.10.18
P1 2dr coupé ★★★★★												
P1	217	2.8	5.2	2.2	6.0	2.3	903	664	36.0	19.6/–	–	7.5.14
MERCEDES-AMG												
C63 4dr saloon ★★★★½												
C63	155	4.4	9.7	3.4	7.5	2.7	469	479	38.1	19/25	1715	3.6.15
C63 S C'vertible	155	4.6	10.2	3.4	7.1	2.7	503	516	35.6	21/27	1850	8.2.17
C63 S Coupé	180	4.3	9.2	3.2	10.7	2.69	503	516	43.2	26/34	1745	24.4.19
CLS53 4dr saloon ★★★★☆												
CLS53 4Matic+	155	4.3	10.3	3.7	9.1	2.7	429	384	43.8	31/39	1980	17.10.18
GT 2dr coupé ★★★★☆												
S	193	3.6	7.8	2.8	5.5	2.5	503	479	34.7	20/29	1715	29.7.15
R	198	3.6	7.3	2.7	4.6	2.4	577	516	30.7	19/23	1555	10.5.17
GT 4-Door Coupé 4dr coupé ★★★★½												
GT63 4Matic+	193	3.3	7.7	2.7	10.7	2.8	577	590	42.6	22/30	2135	13.3.19
SLC 2dr convertible ★★★½☆												
SLC43	155	5.5	12.3	4.2	12.7	3.0	362	384	40.4	27/33	1595	6.7.16
GLC 5dr SUV ★★★½☆												
GLC63 S 4Mtic+	155	3.7	8.9	3.2	15.4	2.8	503	516	43.4	19/26	2020	13.6.18
MERCEDES-BENZ												
A-Class 5dr hatch ★★★★☆												
A200 Sport	139	8.7	22.4	7.9	–	3.2	161	184	33.6	39/57	1379	4.7.18
B-Class 5dr MPV ★★★★☆												
B180 Sport	132	8.4	23.5	8.3	–	2.73	134	148	33.6	33/51	1405	3.4.19
CLA 4dr saloon ★★★☆☆												
CLA 250	155	6.8	17.1	6.1	11.5	2.88	221	258	–	34/49	1555	21.8.19
C-Class 4dr saloon/5dr estate ★★★★☆												
C220 Bluetec	145	8.1	22.9	8.1	11.7	2.8	168	295	42.4	41/51	1700	23.7.14
E-Class 4dr saloon/5dr estate/2dr convertible/2dr coupé ★★★★☆												
E400 Coupé	155	5.6	13.4	4.9	14.8	2.9	328	354	46.7	30/39	1845	14.6.17
S-Class 4dr saloon/2dr coupé ★★★★★												
S350 Bluetec	155	7.3	19.0	6.8	3.9*	2.7	255	457	45.6	34/44	1975	16.10.13
S63 AMG Coupé	155	4.5	9.6	3.4	6.8	2.7	577	664	42.8	22/25	2070	3.12.14
GLA 5dr SUV ★★★½☆												
GLA220 CDI SE	134	8.1	23.8	7.8	4.7	2.65	168	258	36.4	40/48	1535	14.5.14
GLC 5dr SUV ★★★★☆												
GLC250d	143	7.8	23.5	7.8	15.7	3.2	201	369	46.9	39/43	1845	10.2.16
G-Class 5dr SUV ★★★★☆												
G350d AMG Line	124	7.5	22.4	7.2	15.0	3.40	282	443	46.0	25/31	2451	17.7.19
GL 5dr SUV ★★★★☆												
GL350 AMG Sp't	137	8.3	24.8	8.2	5.0*	2.6	255	457	37.7	28/33	2455	24.7.13
X-Class 4dr pick-up ★★★½☆												
X250d 4Matic	109	11.2	38.9	11.6	–	3.2	187	332	31.3	27/36	2159	20.6.18
SL 2dr convertible ★★★★☆												
SL500	155	4.3	9.9	3.6	6.5	2.7	429	516	39.6	10/24	1815	8.8.12
MG												
3 5dr hatch ★★★½☆												
1.5 3Form Sp't	108	11.4	41.5	11.6	19.6	2.8	105	101	22.2	37/41	1150	25.12.13
ZS 5dr SUV ★★★☆☆												
EV Exclusive	87	8.9	–	8.0	5.2*	3.60	141	260	–	2.7/3.1†	1556	4.12.19
MINI												
Mini 3dr hatch ★★★★½												
Cooper S	146	6.9	17.1	5.9	6.7	2.5	189	221	26.4	35/54	1235	2.4.14
C'per S Wks 210	146	7.2	16.4	6.0	6.5	3.0	207	221	26.5	31/47	1235	6.12.17
Clubman 5dr hatch ★★★½☆												
Cooper D	132	8.6	25.9	8.2	10.0	2.9	148	243	34.9	51/52	1320	25.11.15
Convertible 2dr convertible ★★★★½												
Cooper	129	9.2	25.4	8.8	12.4	2.7	134	162	31.0	46/53	1280	6.4.16
Countryman 5dr hatch ★★★½☆												
Cooper D	129	9.0	26.4	8.4	11.5	2.8	148	243	36.2	42/48	1480	22.2.17
Plug-in Hybrid	123	6.7	24.4	6.2	5.5	3.5	221	284	30.1	42/50	1735	26.7.17
MITSUBISHI												
Eclipse Cross 5dr SUV ★★★☆☆												
1.5 First Ed 2WD	127	9.0	26.5	8.3	13.8	3.0	161	184	30.9	34/45	1455	14.3.18
Outlander 5dr SUV ★★★½☆												
PHEV GX4hs	106	10.0	30.5	9.5	6.2	3.0	200	245	–	44/38	1810	16.4.14
MORGAN												
3 Wheeler 2dr roadster ★★★★★												
3 Wheeler	115	8.0	29.9	7.7	5.1	3.56	80	103	21.3	30/–	520	6.6.12
NISSAN												
Micra 5dr hatch ★★★★☆												
0.9 N-Connecta	109	12.1	44.7	11.7	15.6	2.8	89	103	24.3	45/57	1068	26.4.17
DIG-T 117 N-Sport	121	10.2	28.8	9.4	16.5	3.2	115	148	31.2	33/55	1105	27.3.19
Juke 5dr SUV ★★★½☆												
Acenta 1.6	111	10.3	41.6	9.9	12.7	3.0	115	117	19.5	36/46	1230	3.11.10
Nismo 1.6	134	6.9	17.2	6.0	7.2	2.5	197	184	23.8	31/39	1295	22.5.13
Qashqai 5dr SUV ★★★★½												
1.5 dCi 2WD	113	10.8	39.2	11.1	12.9	2.9	109	192	35.0	49/56	1365	19.2.14
X-Trail 5dr SUV ★★★½☆												
1.6 dCi 2WD	117	11.2	39.7	11.7	11.2	3.0	128	236	32.8	42/48	1550	13.8.14
GT-R 2dr coupé ★★★★½												
Recaro	196	3.4	7.8	2.7	5.3	2.7	562	470	28.0	22/31	1752	16.11.16
NOBLE												
M600 2dr coupé ★★★★½												
M600	225	3.5	6.8	2.5	4.7	2.45	650	604	29.9	18/25	1305	14.10.09
PEUGEOT												
208 3/5dr hatch ★★★☆☆												
1.2 VTI Active	109	14.2	–	14.5	9.1	2.9	81	87	21.2	41/45	1080	18.7.12
GTi 30th	143	6.5	16.1	5.8	6.7	2.9	205	221	25.6	41/42	1160	11.2.15
308 3/5dr hatch ★★★★☆												
1.6 e-HDi 115	118	10.1	32.6	10.4	13.9	3.0	114	199	38.5	48/59	1395	15.1.14
508 4dr saloon ★★★★☆												
GT Bl'HDi 180	146	8.8	23.4	8.5	10.8	2.6	174	295	43.9	35/52	1535	24.10.18
2008 5dr SUV ★★★½☆												
1.6 e-HDi	117	10.7	37.8	11.5	11.8	3.2	114	199	32.7	49/59	1180	19.6.13
3008 5dr SUV ★★★½☆												
1.6 Bl'HDi GT L'e	117	12.0	44.3	12.1	13.2	3.2	118	221	34.6	42/53	1300	18.1.17
5008 5dr MPV ★★★½☆												
2.0 Bl'HDi GT L'e	129	10.8	28.8	9.7	11.5	2.7	148	273	37.6	51/60	1490	1.11.17
PORSCHE												
718 2dr coupé/roadster ★★★★½												
Boxster	171	5.4	12.2	4.3	5.2	2.5	296	280	25.8	26/36	1335	8.6.16
Cayman S	177	4.8	10.5	3.9	4.8	2.5	345	310	25.8	28/29	1430	10.8.16
Cayman GTS	180	4.8	10.2	3.5	4.7	2.5	361	310	25.8	28/39	1375	9.5.18
911 GT2 2dr coupé ★★★★☆												
GT2 RS	211	3.0	6.1	2.2	5.6	2.6	691	553	32.1	19/28	1470	18.7.18
911 2dr coupé ★★★★½												
Carrera S	191	3.4	7.7	2.8	14.3	–	444	391	44.1	23/39	1515	29.5.19
918 Spyder 2dr coupé ★★★★★												
4.6 V8	214	2.6	5.3	1.9	2.2	2.3	874	944	41.2	28/44	1740	22.10.14
Panamera 4dr saloon ★★★★★												
4S Diesel	177	4.1	10.3	3.8	–	3.0	416	627	50.7	32/43	2050	1.2.17
Macan 5dr SUV ★★★★½												
Turbo	165	4.7	11.8	4.3	7.9	2.4	394	406	35.7	22/31	2000	4.6.14
Cayenne 5dr SUV ★★★★☆												
Turbo	177	3.9	9.3	3.3	5.3	2.8	542	568	44.7	21/31	2250	5.9.18
RENAULT												
Twingo 5dr hatch ★★★½☆												
Dynamique	94	17.6	–	19.1	29.4	2.9	69	67	20.8	42/52	865	29.10.14
Zoe 5dr hatch ★★★½☆												
Dynamique	84	12.3	–	13.9	9.1	2.9	87	162	7.8	4.0/3.4†	1468	31.7.13
Clio 5dr hatch ★★★★½												
TCe 100 Iconic	116	11.6	36.0	10.9	16.9	3.36	99	118	26.5	46/57	1138	27.11.19
Mégane 5dr hatch ★★★☆☆												
1.5 dCi Dyn. S Nav	116	11.1	35.2	11.1	13.2	2.8	108	192	33.9	47.2	1387	17.8.16
RS Trophy-R	163	5.6	12.8	4.6	6.8	2.67	296	295	27.1	26/38	1280	23.10.19
Grand Scenic 5dr MPV ★★★½☆												
dCi 130 Dyn. S Nav	118	11.4	35.8	11.3	10.2	3.4	129	236	32.1	47/61	1601	25.1.17
Kadjar 5dr SUV ★★★★☆												
dCi 115 Dyn. S Nav	113	14.5	–	14.6	17.2	2.3	108	192	35.0	52/69	1380	21.10.15
Koleos 5dr SUV ★★★☆☆												
dCi 175 4WD Sig.	126	9.8	31.3	10.1	14.3	2.9	175	280	–	34/38	1747	20.8.17
ROLLS-ROYCE												
Phantom 4dr saloon ★★★★★												
Phantom	155	5.5	11.8	4.4	2.5*	2.8	563	664	51.2	8/28	2560	4.4.18
Ghost 4dr saloon ★★★★☆												
Ghost	155	4.9	10.6	3.9	2.3*	2.6	563	575	46.0	18/23	2450	7.7.10
Wraith 2dr coupé ★★★★½												
Wraith	155	4.6	10.0	4.5	2.1*	2.9	624	590	45.9	15/27	2435	21.5.14
Dawn 2dr convertible ★★★★☆												
Dawn	155	5.2	11.6	4.2	2.4*	2.9	563	575	47.7	19/25	2560	1.6.16
SEAT												
Ibiza 5dr hatch ★★★★½												
SE Tech'y 1.0 TSI	113	10.0	34.1	10.0	10.1	3.0	94	129	27.2	45/56	1047	19.7.17
Leon 3/5dr hatch ★★★★☆												
Cupra SC 280	155	5.9	13.6	4.4	7.1	2.7	276	258	27.2	28/36	1441	26.3.14
Arona 5dr SUV ★★★★☆												
SE Tech'y 1.0 TSI	107	10.5	–	10.6	11.9	3.1	94	129	26.2	37/41	1165	15.11.17
Ateca 5dr SUV ★★★★½												
1.6 TDI SE	114	10.5	35.6	9.3	14.0	2.9	114	184	36.4	50/62	1300	19.10.16
SMART												
Forfour Electric Drive 5dr hatch ★★½☆☆												
Prime Premium	81	13.2	–	14.5	10.6	2.8	80	118	–	3.1/3.9†	1200	23.8.17
SKODA												
Fabia 5dr hatch ★★★★☆												
1.2 TSI 90 SE-L	113	12.6	46	12.5	15.0	3.4	89	118	26.1	45/49	1109	21.1.15
Scala 5dr hatch ★★★½☆												
1.5 TSI 150 DSG	136	7.9	21.5	7.3	11.8	2.78	148	184	33.5	42/53	1200	31.7.19
Octavia 4dr saloon/5dr estate ★★★★☆												
vRS 245 Estate	155	6.9	16.2	5.8	7.3	2.9	242	273	29.8	33/39	1392	16.8.17
Superb 5dr hatch/estate ★★★★½												
2.0 TDI SE	135	8.8	24.9	8.2	11.2	2.8	148	251	37.2	47/54	1505	9.9.15
Karoq 5dr SUV ★★★½☆												
2.0 TDI 150 Scout	122	8.9	28.7	9.6	12.8	2.86	148	251	36.1	38/47	1629	30.1.19
Kodiaq 5dr SUV ★★★★☆												
2.0 TDI Edition	121	9.5	34.7	10.1	12.2	2.8	148	251	33.5	37/48	1751	23.11.16
SSANGYONG												
Tivoli XLV ★★★☆☆												
ELX auto	107	12.0	44.5	12.6	7.9	3.1	113	221	33.2	45/58	1425	14.9.16
SUBARU												
XV 5dr SUV ★★★☆☆												
2.0i SE L'tronic	120	10.1	27.7	9.0	27.0	3.4	154	145	41.5	31/39	1451	28.2.18
Levorg 5dr estate ★★★☆☆												
GT 1.6i L'tronic	130	8.4	24.6	7.9	21.0	2.6	168	184	31.9	34/36	1537	13.1.16
WRX 4dr saloon ★★★☆☆												
STi Type UK	159	5.4	13.3	5.1	9.4	2.8	296	300	27.6	23/31	1534	25.6.14
SUZUKI												
Swift 5dr hatch ★★★½☆												
1.0 SZ5	121	10.5	33.0	10.3	11.8	2.9	110	125	26.3	45/56	925	17.5.17
Celerio 5dr hatch ★★★½☆												
1.0 SZ4	96	12.9	–	14.3	25.0	3.0	67	66	22.4	54/57	835	25.3.15
Baleno 5dr hatch ★★★½☆												
1.0T B'jet SZ5	124	9.8	29.5	9.7	11.2	2.9	110	125	26.3	50/55	950	3.8.16
SX4 S-Cross 5dr SUV ★★★½☆												
1.6 DDiS SZ4	111	10.0	32.6	10.1	8.9	2.6	118	236	35.1	57/67	1290	30.10.13
Jimny 3dr SUV ★★★½☆												
1.5 SZ5 Allgrip	90	11.9	–	11.6	15.1	4.4	100	95	19.8	29/35	1112	28.11.18
Vitara 5dr SUV ★★★½☆												
1.6 SZ5	112	9.5	29.8	9.5	15.5	–	118	115	24.3	49/47	1075	29.4.15
TESLA												
Model 3 4dr saloon ★★★★☆												
St'd Range Plus	140	5.8	14.2	4.7	2.8	2.77	252	277	8.6	3.1/4.0†	1633	4.9.19
Model S 4dr saloon ★★★★½												
P90D	155	5.2	9.1	3.0	1.9	2.9	525	713	8.5	2.4/3.3†	2200	20.4.16
Model X 5dr SUV ★★★★☆												
90D	155	4.7	13.1	2.8	2.5	2.7	416	487	8.5	1.6/2.0†	2508	15.2.17
TOYOTA												
Yaris 3dr hatch ★★★½☆												
GRMN	143	6.4	15.4	5.4	9.8	2.9	209	184	27.7	27/39	1135	28.3.18
Corolla 4dr saloon/5dr hatch/5dr estate ★★★★☆												
2.0 Hybrid ST	112	8.5	22.4	7.7	4.5*	2.84	178	–	–	44/53	1537	5.6.19
GT86 2dr coupé ★★★★★												
2.0 manual	140	7.4	18.8	6.8	10.6	2.6	197	151	23.5	30/45	1235	4.7.12
Prius 5dr hatch ★★★★☆												
Business E'tion	112	11.1	32.0	10.7	6.4*	3.1	121	–	–	53/63	1400	16.3.16
Mirai 4dr saloon ★★★★☆												
Mirai	111	10.1	36.5	10.2	6.5*	3.3	152	247	22.5	44/62**	1400	27.4.16
C-HR 5dr SUV ★★★★☆												
Excel 1.8 Hybrid	106	11.6	43.5	11.9	7.3*	2.7	121	–	–	49/60	1420	4.1.17
GR Supra 2dr coupé ★★★★☆												
Pro	155	4.4	10.7	3.6	7.6	2.65	335	368	39.2	28/39	1495	14.8.19
VAUXHALL												
Adam 3dr hatch ★★★☆☆												
1.2 Jam Ecoflex	103	14.3	–	15.3	20.8	2.8	68	85	21.8	39/45	1086	6.2.13
Corsa 3/5dr hatch ★★★½☆												
1.4T SRi VX-Line	115	11.7	45.1	12.1	15.3	2.9	99	148	34.8	37/42	1176	19.11.14
VXR	143	7.2	18.3	6.4	7.8	2.4	202	181	23.8	29/34	1280	6.5.15
Crossland X 5dr SUV ★★★☆☆												
1.2T 130 Elite	128	9.8	31.4	10.3	8.9	2.9	128	170	30.5	40/54	1199	7.6.17
Astra 5dr hatch/estate ★★★★☆												
1.6 CDTi 136 SRi	127	8.8	25.7	8.8	8.6	2.6	134	236	33.4	55/58	1350	30.9.15
ST CDTi B'tbo SRi	137	8.4	22.2	7.7	8.1	2.6	158	258	33.7	57/59	1435	13.4.16
Combo Life 5dr MPV ★★★½☆												
1.5 TD 100 En'gy	109	14.7	–	16.2	14.4	2.8	99	184	32.0	45/60	1552	27.12.18
Insignia Grand Sport 4dr saloon ★★★★☆												
2.0D SRi VX-Line	140	8.7	23.8	7.9	8.9	2.7	168	295	36.1	39/51	1507	3.5.17
Insignia Sports Tourer 5dr estate ★★★☆☆												
GSi 2.0 B'tbo D	144	8.4	23.1	7.7	9.5	2.7	207	354	38.6	36/47	1807	30.5.18
VXR8 4dr saloon ★★★★☆												
GTS-R	155	4.8	9.6	3.3	6.6	3.1	587	546	34.9	20/27	1858	10.1.18
VOLKSWAGEN												
Up 3/5dr hatch ★★★★☆												
GTI 1.0 TSI 115	122	8.5	25.7	7.8	7.6	2.8	114	147	24.7	39/54	1070	21.3.18
Polo 5dr hatch ★★★★½												
1.0 TSI 95 SE	116	10.7	34.4	11.1	12.1	2.8	94	129	27.1	43/57	1145	31.1.18
GTI	147	6.7	17.4	5.9	8.6	2.8	197	236	–	37/47	1355	1.8.18
Golf 3/5dr hatch ★★★★½												
GTI Perf. DSG	155	6.5	16.4	5.9	8.9	2.8	227	258	34.4	32/38	1402	10.7.13
GTE	138	7.7	18.2	6.1	7.7	2.5	201	258	7.6	44/45	1599	20.5.15
1.5 TSI R-line	134	8.8	22.7	8.1	9.9	2.1	148	184	28.0	40/52	1324	2.8.17
T-Roc 5dr SUV ★★★★½												
2.0 TSI SEL 4Mn	134	6.7	20.2	6.5	13.3	3.2	187	236	35.6	31/37	1495	24.1.18
Arteon 5dr hatch ★★★½☆												
2.0 BiTDI 240	152	6.5	17.7	6.2	8.9	3.3	237	369	37.8	38/56	1828	27.9.17
Passat 4dr saloon/5dr estate ★★★★☆												
2.0 TDI 190 GT	144	8.7	23.6	8.1	13.1	3.2	187	295	37.9	45/52	1614	4.2.15
GTE	140	7.6	19.0	6.1	7.8	3.3	215	295	32.3	38/43	1722	7.9.16
Touran 5dr MPV ★★★★☆												
2.0 TDI 150 SE	128	9.9	29.3	9.7	13.6	3.2	148	251	37.0	54/60	1571	3.2.16
Tiguan 5dr SUV ★★★★½												
2.0 TDI 150 SE	127	10.4	33	9.6	12.4	3.2	148	251	40.0	44/52	1683	22.6.16
Caravelle 5dr MPV ★★★★☆												
2.0 BiTDI Exec.	126	11.6	36.1	11.7	10.2	3.2	201	332	22.7	38/45	2386	23.12.15
Touareg 5dr SUV ★★★½☆												
3.0 TDI R-Ln Tch	146	7.2	18.6	6.5	21.5	2.8	282	442	47.6	37/42	2070	8.8.18
VOLVO												
XC40 5dr SUV ★★★★½												
D4 AWD First Ed.	130	8.5	24.8	8.5	13.7	3.0	188	295	39.8	38/44	1735	7.2.18
S90 4dr saloon ★★★★☆												
D4 Momentum	140	8.2	22.1	7.9	11.1	2.6	188	295	40.1	40/51	1717	13.7.16
V60 5dr estate ★★★★☆												
D4 M'tum Pro	137	8.9	23.8	8.2	12.7	2.8	188	295	41.0	35/43	1847	27.6.18
XC60 5dr SUV ★★★½☆												
D4 AWD R-Des'n	127	8.9	26.2	8.8	14.2	2.8	188	295	38.9	40/49	1836	5.7.17
XC90 5dr SUV ★★★★☆												
D5 Momentum	137	8.3	23.9	8.3	5.0*	–	222	347	33.6	37/39	2009	17.6.15
WESTFIELD												
Sport 0dr roadster ★★★★☆												
Sport 250	142	3.6	11.1	6.4	4.0	2.7	252	270	22.7	32/42	665	29.11.17
ZENOS												
E10 0dr roadster ★★★★½												
S	140	4.3	11.2	4.1	5.3	2.9	250	295	33.9	21/23	725	7.10.15

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ECONOMY EXPLAINED

Between the various figures produced on the old-style 'NEDC', transitional 'NEDC correlated' and new-style 'WLTP' lab emissions and fuel economy tests, it's become tricky to compare manufacturers' claimed efficiency on the latest new cars. When you see a fuel economy and CO_2 figure reference elsewhere, it's often without explanation.

So, to provide as fair and clear a basis for comparison as possible, you'll only ever read 'WLTP combined' fuel economy and CO_2 figures in Autocar's first drive reviews, features and comparison tests – and on these data pages. Those are the aggregated result of four lab tests carried out across as many different cruising speed ranges – although they're sometimes expressed as a range rather than as one specific figure to show the different results recorded by the heaviest and lightest available examples of the car in question (depending on optional equipment). Not all car makers have published these figures yet, however.

In road tests, you'll also see our own independently produced real-world fuel economy test results for comparison with the lab test claims. We produce an 'average', 'track' and 'touring' figure for each car we test – as often as possible on a brim-to-brim test basis. While 'average' represents the overall economy returned by a new car over a full road test, and 'track' is relevant only to intensive performance testing (the length and conditions of which can vary slightly), 'touring' gives the best guide of the kind of economy you might see from a car at a steady 70mph UK motorway cruise.

We do real-world efficiency and range testing on electric cars, too, expressing the former in terms of miles per kilowatt hour, as EV manufacturers do increasingly widely by convention.

STAR RATINGS EXPLAINED

- ☆☆☆☆☆ Inherently dangerous/unsafe. Tragically, irredeemably flawed.
- ★☆☆☆☆ Appalling. Massively significant failings.
- ★☆☆☆☆ Very poor. Fails to meet any accepted class boundaries.
- ★★☆☆☆ Poor. Within acceptable class boundaries in a few areas. Still not recommendable.
- ★★☆☆☆ Off the pace. Below average in nearly all areas.
- ★★★☆☆ Acceptable. About average in key areas, but disappoints.
- ★★★☆☆ Competent. Above average in some areas, average in others. Outstanding in none.
- ★★★★☆ Good. Competitive in key areas.
- ★★★★☆ Very good. Very competitive in key areas, competitive in secondary respects.
- ★★★★★ Excellent. Near class-leading in key areas and in some ways outstanding.
- ★★★★★ Brilliant, unsurpassed. All but flawless.

ABARTH

595 3dr hatch/2dr open £16,685–£25,485 ★★★½☆

The Fiat 500's Abarth makeover makes it a true pocket rocket. **LxWxH** 3657x1627x1485 **Kerb weight** 1070kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 T-jet 145	143	130	7.8	37.2	134
1.4 T-jet 160 Trofeo	157	135	7.4	35.3	134
1.4 T-jet 165 Turismo	162	135	7.3	38.2	139
1.4 T-jet 180 Competizione	177	140	6.9	36.2	155
1.4 T-jet 180 Essesse	177	140	6.7	36.2	155

695 3dr hatch/2dr open £23,895–£25,895 ★★★½☆

A convincing track-day 500 with decent dynamic ability, but overly firm ride spoils it. **LxWxH** 3657x1627x1485 **Kerb weight** 1045kg

1.4 T-jet 180 Rivale	177	140	6.7	36.2	155

ALFA ROMEO

Giulietta 5dr hatch £19,975–£25,730 ★★★☆☆

Long in the tooth but still seductive, shame it's not rounded or lavish enough. **LxWxH** 4351x1798x1465 **Kerb weight** 1305kg

1.4 TB 120	118	121	9.4	36.2	164
1.6 JTDM-2 120	148	121	10.0	49.6	123-125
2.0 JTDM-2 170	168	133	8.3	47.9	TBC

Giulia 4dr saloon £33,595–£64,900 ★★★★½

Handsome and special dynamically but lacks finesse and only comes as an auto. **LxWxH** 4643x1860x1436 **Kerb weight** 1429kg

2.0 Turbo Petrol 200	197	146	6.6	36.2	153
2.0 Turbo Petrol 280	276	149	5.7	33.6	158
2.2 Turbo Diesel 160	158	137	8.2	53.3	128
2.2 Turbo Diesel 190	187	143	7.1	52.3	128
2.9 BiTurbo Quadrifoglio	503	191	3.9	27.2	TBC

Stelvio 5dr SUV £37,745–£70,900 ★★★★½

Alfa's first SUV is a solid effort. Choosing the petrol version gives it charisma. **LxWxH** 4687x1903x1671 **Kerb weight** 1604kg

2.2 Turbo Diesel 190	187	130	7.6	46.3	138
2.2 Turbo Diesel 190 Q4 AWD	187	130	7.6	44.1	147
2.2 Turbo Diesel 210 Q4 AWD	207	134	6.6	43.5	147
2.0 Turbo 200 Q4 AWD	197	134	7.2	30.4	176
2.0 Turbo 280 Q4 AWD	276	143	5.7	30.4	175
2.9 BiTurbo Quadrifoglio	503	197	3.8	TBC	TBC

ALPINA

B3 S 5dr touring £63,000 ★★★★☆

Previously falling behind in the power stakes, but the recent facelift rectifies that. **LxWxH** 4632x1811x1431 **Kerb weight** 1705kg

3.0 BiTurbo	433	188-190	4.3	TBC	TBC

B4 S 2dr coupé/open £73,100–£78,600 ★★★½☆

A retuned version of the 4 Series that feels more at home on the track than the road. **LxWxH** 4640x1825x1373 **Kerb weight** 1690kg

3.0 BiTurbo	433	189-190	4.2-4.3	TBC	TBC

B5 4dr saloon/5dr touring £89,000–£91,000 ★★★★☆

Is it the best alternative to an M5? Yes, at least from a practicality viewpoint. **LxWxH** 4956x1868x1466 **Kerb weight** 2015kg

4.4 V8 BiTurbo	599	200-205	3.5-3.7	25.4	254

B7 4dr saloon £121,850 ★★★★☆

A 7 Series with a power boost gives BMW a worthy challenger to the AMG S-Classes. **LxWxH** 5250x1902x1491 **Kerb weight** 2060kg

4.4 V8 BiTurbo	599	205	4.2	24.4	265

D5 S 4dr saloon £62,000 ★★★★☆

The excellent 5 Series receives some Alpina tweaking to make it a brilliant cruiser. **LxWxH** 4956x1868x1466 **Kerb weight** 1870kg

3.0 BiTurbo	345	171	4.9	TBC	TBC

XD3 5dr SUV £57,900 ★★★★☆

Pleasant BMW SUV impressively enhanced with the usual Alpina toolkit. **LxWxH** 4732x1897x2015 **Kerb weight** 2015kg

3.0 BiTurbo	330	158	4.9	TBC	TBC

ALPINE

A110 2dr coupé £47,810–£56,810 ★★★★★

A much, much greater car and achievement than the sum of its parts suggest. **LxWxH** 4180x1980x1252 **Kerb weight** 1080kg

1.8 Turbo	252	155	4.5	44.1	144
1.8 Turbo S	288	162	4.4	43.4	146

ARIEL

Atom 0dr open £39,950 ★★★★½

Simple, purist concept remains but everything else has changed... for the better. **LxWxH** 3520x1880x1122 **Kerb weight** 595kg

2.0 turbo	320	162	2.8	TBC	TBC

Nomad 0dr open £38,000 ★★★★★

Well inside the top 10 list of our favourite cars. A revelation and a riot to drive. **LxWxH** 3215x1850x1425 **Kerb weight** 670kg

2.4 K24 i-VTEC	235	125	3.4	TBC	TBC

ASTON MARTIN

Vantage 2dr coupé £123,850 ★★★★½

The faster, cleverer, more hardcore entry-level Aston tops its class. **LxWxH** 4465x1942x1273 **Kerb weight** 1630kg

4.0 V8	503	195	3.5	11.6	TBC

DB11 2dr coupé/2dr open £147,900–£174,995 ★★★★★

The stunning replacement for the already seductive DB9 is tyre-shreddingly good. **LxWxH** 4739x2060x1279 **Kerb weight** 1875kg

4.0 V8	503	187	4.0	10.6	TBC
5.2 V12 AMR	630	208	3.7	13.4	TBC

DBS Superleggera 2dr coupé/open £225,000–247,500 ★★★★★

Effortlessly fast, intoxicating to drive: the big Aston is better than ever. **LxWxH** 4712x2146x1280 **Kerb weight** 1693kg

5.2 V12	715	211	3.7	13.5	TBC

Rapide AMR 4dr saloon £194,950 ★★★★☆

The Rapide is one of the most elegant four-door sports cars in the world. **LxWxH** 5019x1929x1360 **Kerb weight** 1995kg

6.0 V12	599	205	4.2	TBC	TBC

AUDI

A1 Sportback 5dr hatch £18,310–£27,230 ★★★½☆

Quite pricey, but a rounded car with plenty of rational appeal. **LxWxH** 4029x1746x1418 **Kerb weight** 1105kg

1.0 25 TFSI	94	118	10.8	50.4	126-127
1.0 30 TFSI	114	126	9.5	49.6-52.3	121-129
1.5 35 TFSI	148	137	7.7	45.6-46.3	139-141
2.0 40 TFSI	197	146	6.5	39.8-40.4	158-160

A3 Sportback 5dr hatch £23,300–£39,145 ★★★★☆

All the above but with the added convenience of five doors and a usefully larger boot. **LxWxH** 4313x1785x1426 **Kerb weight** 1180kg

1.0 30 TFSI	114	128	9.9	46.3-48.7	131-137
1.5 35 TFSI	148	137	8.2	42.2-43.5	146-152
2.0 40 TFSI	187	152	6.8	39.8-40.9	157-161
2.0 TFSI S3	298	155	4.7	33.6-34.9	184-190
1.6 30 TDI	114	126	10.4	49.6-51.4	144-148

A3 Saloon 4dr saloon £25,020–£39,320 ★★★★☆

Undercuts the case to own an A4. Upmarket interior and good to drive. **LxWxH** 4458x1796x1416 **Kerb weight** 1240kg

1.0 30 TFSI	114	131	9.9	46.3-48.7	132-139
1.5 35 TFSI	148	139	8.2	54.3-56.5	131-136
2.0 40 TFSI	187	155	6.8	39.8-40.9	155-160
2.0 TFSI S3	298	155	4.7	34.4-34.9	184-186
1.6 30 TDI	114	131	10.4	51.4-54.3	137-143

A3 Cabriolet 2dr open £31,095–£43,515 ★★★★☆

Compact, affordable, usable and refined. Strong performance, too. **LxWxH** 4423x1793x1409 **Kerb weight** 1380kg

1.5 35 TFSI	148	137	8.9	40.4-41.5	153-157
2.0 40 TFSI	187	155	7.2	38.7-39.8	161-165
2.0 TFSI S3	298	155	5.2	33.2	192-193

A4 4dr saloon £29,260–£42,940 ★★★★☆

High quality and competent but leaves the dynamic finesse to its rivals. **LxWxH** 4726x1842x1427 **Kerb weight** 1320kg

2.0 35 TFSI	148	139	8.6	40.4-40.9	155-159
2.0 40 TFSI	187	155	7.3	39.2-39.8	160-164
2.0 45 TFSI quattro	242	155	5.6	35.8-36.2	177-180
2.0 35 TDI	148	136	8.9	49.6-51.4	144-148
2.0 40 TDI quattro	187	146	7.4	49.6-51.4	144-150

A4 Avant 5dr estate £30,660–£68,270 ★★★★☆

Classy and demure estate lacks the dynamic sparkle of rivals. **LxWxH** 4725x1842x1434 **Kerb weight** 1370kg

2.0 35 TFSI	148	136	8.9	39.2-39.8	160-164
2.0 40 TFSI	187	148	7.5	37.2-38.2	168-172
2.0 45 TFSI quattro	242	155	6.0	34.4-35.3	181-185
3.0 V6 TFSI RS4 Avant	448	155	4.1	29.1	219-220
2.0 35 TDI	148	132	9.2	45.6-47.1	157-163
2.0 40 TDI	187	143-144	7.6-7.9	43.5-44.1	167-171

A5 2dr coupé £35,465–£69,660 ★★★★☆

Refreshed coupé gets a sharper look and a refreshed interior. Still mundane to drive. **LxWxH** 4673x1846x1371 **Kerb weight** 1390kg

2.0 35 TFSI	148	140	8.9	38.7-40.4	158-165
2.0 40 TFSI	187	150	7.2	38.7-40.4	158-165
2.9 V6 TFSI RS5 quattro	443	155	3.9	30.1	212-213
2.0 40 TDI	187	150	7.7	48.7-52.3	142-151
2.0 40 TDI quattro	187	146	7.4	44.8-46.3	160-165
3.0 V6 TDI S5 quattro	345	155	4.8	TBC	TBC

A5 Sportback 5dr coupé £34,790–£69,660 ★★★★☆

Refined, good-looking four-door coupé is sadly short on charm and finesse. **LxWxH** 4733x1843x1386 **Kerb weight** 1425kg

2.0 35 TFSI	148	139	9.1	38.2-39.8	160-167
2.0 40 TFSI	187	150	7.5	38.2-39.8	160-167
2.0 45 TFSI quattro	242	155	5.8	35.8-36.2	178-179
2.9 V6 TFSI RS5 Quattro	448	155	3.9	29.7	215-216
2.0 35 TDI	148	135	9.1	47.1-49.6	149-158
2.0 40 TDI	187	150	7.5	47.9-51.4	144-155
2.0 40 TDI quattro	187	146	7.6	44.1-45.6	162-167
3.0 V6 TDI quattro	345	155	4.9	TBC	TBC

A5 Cabriolet 2dr open £39,395–£58,310 ★★★★☆

More practical than smaller options. Lower-powered, steel-sprung trim is best. **LxWxH** 4673x1846x1383 **Kerb weight** 1600kg

2.0 40 TFSI	187	150	7.9	36.7-37.2	173-174
2.0 45 TFSI quattro	242	155	6.5	34.0-34.4	186-187
2.0 40 TDI	187	150	8.4	45.6-46.3	161-164
2.0 40 TDI quattro	187	145	8.0	42.8-43.5	171-172

A6 4dr saloon £39,860–£55,400 ★★★★☆

Supremely well-constructed but a bit soulless to drive. A smart office on wheels. **LxWxH** 4939x1886x1457 **Kerb weight** 1645kg

2.0 45 TFSI quattro	242	155	6.0	33.6-34.0	188-192
3.0 55 TFSI quattro	335	155	5.1	30.1-30.7	209-212
2.0 40 TDI	201	152	8.1	47.1-48.7	153-158
2.0 40 TDI quattro	201	153	7.6	44.8-46.3	161-164
3.0 50 TDI quattro	282	155	5.5	38.7-39.2	188-191

A6 Avant 5dr estate £41,960–£57,500 ★★★★☆

A capable and high-tech throwback that's a timely reminder of what Audi does best. **LxWxH** 4939x1886x1467 **Kerb weight** 1710kg

2.0 45 TFSI quattro	242	155	6.2	32.5-33.2	193-197
3.0 55 TFSI quattro	335	155	5.3	29.4-30.1	213-217
2.0 40 TDI	201	149	8.3	44.8-46.3	161-166
2.0 40 TDI quattro	201	150	7.8	43.5-44.8	166-170
3.0 50 TDI quattro	282	155	5.7	37.7-38.2	193-196

A7 Sportback 5dr coupé £48,860–£79,385 ★★★½☆

Easy on the eye and to live with, but let down by stolid dynamics. **LxWxH** 4969x1908x1422 **Kerb weight** 1880kg

2.0 45 TFSI quattro	242	155	6.2	32.8-33.6	190-195
3.0 55 TFSI quattro	335	155	5.3	29.7-30.1	214-215
2.0 40 TDI	201	152	8.3	45.6-47.9	155-164
2.0 40 TDI quattro	201	155	7.0	44.1-45.6	162-169
3.0 45 TDI quattro	227	155	6.5	37.7-38.2	193-195
3.0 50 TDI quattro	282	155	5.7	37.7-38.2	193-196
3.0 TDI S7 quattro	344	155	5.1	TBC	TBC

A8 4dr saloon £71,200–£81,315 ★★★★☆

Technical tour de force benefits from Audi's knack of making very good limousines. **LxWxH** 5172x1945x1473 **Kerb weight** 1920kg

3.0 55 TFSI quattro	335	155	5.6	28.0-29.7	216-228
3.0 55 TFSI quattro LWB	335	155	5.7	27.7-28.8	223-232
3.0 50 TDI quattro	282	155	5.9	37.7-40.9	182-196
3.0 50 TDI quattro LWB	282	155	5.9	37.7-38.7	190-197

E-tron 5dr SUV £72,270–£83,020 ★★★★½

A rounded, uber-luxurious addition to the premium EV niche. **LxWxH** 4901x1935x1629 **Kerb weight** 2490kg

55 quattro 95kWh	403	124	5.4	TBC	0

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Q2 5dr SUV £23,395–£37,820 ★★★★☆
Audi's smallest SUV is a decent stepping stone from the A3 to the Q range. **LxWxH** 4191x1794x1508 **Kerb weight** 1205kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 30 TFSI	114	122	10.3	44.8-46.3	137-142
1.5 35 TFSI	148	131	8.5	40.9-42.2	152-157
2.0 40 TFSI quattro	187	141	6.5	33.2-34.9	184-192
2.0 SQ2 TFSI	298	155	4.8	32.1-33.2	192-199
1.6 30 TDI	114	122	10.5	43.5-44.8	166-170
2.0 35 TDI quattro	148	131	8.1	44.1-46.3	160-168

Q3 5dr SUV £30,805–£47,130 ★★★½☆
Typically refined and competent but feels more like an A3 than an Audi SUV. **LxWxH** 4388x1831x1608 **Kerb weight** 1385kg

1.5 35 TFSI	148	128-131	9.2-9.6	36.7-37.7	169-176
2.0 40 TFSI quattro	187	136	7.4	30.4-30.7	208-210
2.0 45 TFSI quattro	227	144	6.3	31.0	205-207
2.0 35 TDI	148	128	9.2	44.1-44.8	165-167
2.0 35 TDI quattro	148	131	9.3	39.2-40.9	182-188
2.0 40 TDI quattro	188	137	8.0	37.7	196-197

Q3 Sportback 5dr SUV £36,365–£48,765 ★★★½☆
A more sporting take on the compact SUV, with similarly stable handling. **LxWxH** 4500x1856x1567 **Kerb weight** 1460kg

1.5 35 TFSI	148	126	9.6	47.9-48.7	134-132
2.0 45 TFSI quattro	227	144	6.5	37.7	171
2.0 35 TDI	148	126	9.3	50.4-51.4	148-146

Q5 5dr SUV £42,095–£55,035 ★★★★☆
Appealing combination of Audi allure, affordable SUV practicality and attractiveness. **LxWxH** 4663x1893x1659 **Kerb weight** 1720kg

2.0 45 TFSI quattro	242	147	6.4	30.4-32.5	198-211
2.0 40 TDI quattro	187	136	8.1	36.2-38.2	193-204
2.0 50 TFSI e	249	148	6.1	128.4	49
3.0 V6 TDI SQ5 quattro	342	155	5.1	TBC	TBC

Q7 5dr SUV £54,070–£95,060 ★★★★☆
Unengaging to drive and light on feel, but the cabin is both huge and classy. **LxWxH** 5052x1968x1740 **Kerb weight** 2060kg

3.0 V6 45 TDI quattro	228	142	7.3	32.5-33.6	220-228
3.0 V6 50 TDI quattro	282	152	6.3	32.1-33.2	221-231
4.0 V8 SQ7 TDI	429	155	4.8	37.2	200

Q8 5dr SUV £67,760–£104,990 ★★★★☆
Striking and effective coupé-SUV range-topper leaves us wanting more. **LxWxH** 4986x1995x1705 **Kerb weight** 2145kg

3.0 V6 55 TFSI quattro	335	155	5.9	26.2-25.7	246-249
3.0 V6 50 TDI quattro	282	152	6.3	32.5-32.8	225-228
4.0 V8 SQ8 TDI	429	155	4.8	36.2	205

TT 2dr coupé £32,140–£53,905 ★★★★☆
Still serves up plenty of pace, style and usability for the money. It's better to drive, too. **LxWxH** 4191x1966x1376 **Kerb weight** 1365kg

2.0 40 TFSI	194	155	6.6	40.9	155-156
2.0 45 TFSI	242	155	5.8-5.9	39.8	161-162
2.0 45 TFSI quattro	242	155	5.2	35.3	181-182
2.0 TTS	302	155	4.5	34.9-35.3	182-183
2.5 TTRS	395	155	3.7	30.7-31.0	207-209

TT Roadster 2dr open £33,890–£55,655 ★★★★☆
Plenty of pace and driver reward, along with prestige and design-icon style. **LxWxH** 4191x1966x1355 **Kerb weight** 1455kg

2.0 40 TFSI	194	155	6.9	39.8	160-162
2.0 45 TFSI	242	155	6.0-6.1	38.7	165-166
2.0 45 TFSI quattro	242	155	5.5	34.0-34.4	187-188
2.0 TTS	302	155	4.8	34.0	187-188
2.5 TTRS	395	155	3.9	29.7-30.1	213-215

R8 2dr coupé £128,295–£154,195 ★★★★☆
Usable but no less involving or dramatic for it. V10 is deliciously brutal. **LxWxH** 4426x1940x1240 **Kerb weight** 1590kg

5.2 V10 FSI quattro	532	198	3.5	21.4-21.6	297-298
5.2 V10 FSI Plus quattro	601	205	3.2	21.2-21.4	299-301

R8 Spyder 2dr open £136,985–£162,885 ★★★★☆
Taking the roof off the R8 enhances the drama tenfold. **LxWxH** 4426x1940x1245 **Kerb weight** 1680kg

5.2 V10 FSI quattro	532	197	3.6	21.2	301-302
5.2 V10 FSI Plus quattro	601	204	3.3	20.9-21.1	304-305

BAC

Mono 0dr open £165,125 ★★★★½
An F-22 Raptor for the road, only significantly better built.
LxWxH 3952x1836x1110 **Kerb weight** 580kg

2.5 VVT	305	170	2.8	TBC	TBC

BENTLEY

Continental GT 2dr coupé £148,800–£159,900 ★★★★☆
Refined and improved in every area, making the Conti a superb grand tourer. **LxWxH** 4850x1966x1405 **Kerb weight** 2244kg

4.0 V8	542	198	3.9	TBC	TBC
6.0 W12	626	207	3.6	24.1	308

Continental GTC 2dr open £163,700–£176,000 ★★★★½
Immensely capable and refined open-top cruiser with effortless performance. **LxWxH** 4850x2187x1399 **Kerb weight** 2414kg

4.0 V8	542	198	4.0	TBC	TBC
6.0 W12	626	207	3.7	20.2	317

Mulsanne 4dr saloon £234,000–£280,500 ★★★★☆
If the Rolls Phantom is best from the back seat, the Mulsanne is best in the front. **LxWxH** 5575x1926x1521 **Kerb weight** 2685kg

6.75 V8	505	184	5.1-5.3	17.4	365
6.75 V8 Speed	530	190	4.9	17.4	365

Bentayga 5dr SUV £130,500–£182,200 ★★★★½
Crewe's first attempt at a luxury SUV is a solid effort. The Diesel is wondrous. **LxWxH** 5140x1998x1742 **Kerb weight** 2505kg

4.0 V8	542	171	4.5	21.7	296
6.0 W12 Speed	626	190	3.9	TBC	308

BMW

1 Series 5dr hatch £24,430–£36,430 ★★★★½
May not drive like a traditional BMW but delivers on upmarket hatch values. **LxWxH** 4319x1799x1434 **Kerb weight** 1365kg

118i	138	132	8.5	40.9-45.6	114-121
M135i xDrive	302	155	4.8	34.4-35.8	155-157
116d	114	TBC	10.1-10.3	54.3-61.4	103
118d	148	134	8.4-8.5	54.3-57.6	108-111
120d xDrive	187	TBC	7.0	48.7-58.3	117-119

2 Series 2dr coupé £25,765–£53,260 ★★★★½
A proper compact coupé now. Could be better equipped, however. **LxWxH** 4432x1774x1418 **Kerb weight** 1420kg

218i	134	130	8.8-8.9	35.8-38.2	TBC
220i	181	143	7.2	36.2-38.2	TBC
230i	248	155	5.6	35.8-36.7	TBC
M240i	335	155	4.6-4.8	32.5	TBC
M2 Competition	404	155	4.2-4.4	28.2-29.1	TBC
218d	148	132	8.3-8.5	47.9-52.3	TBC
220d	187	143	7.1-7.2	47.1-50.4	TBC
220d xDrive	187	140	7.0	43.5-46.3	TBC
225d	220	151	6.3	46.3-47.9	TBC

2 Series Convertible 2dr open £28,965–£43,085 ★★★½☆
Better than its 1 Series forebear but lacks truly distinguishing premium qualities. **LxWxH** 4432x1774x1413 **Kerb weight** 1440kg

218i	134	130	9.4-9.6	33.6-36.2	TBC
220i	181	143	7.7	34.4-35.8	TBC
230i	248	155	5.9	34.0-34.9	TBC
M240i	335	155	4.7-4.9	31.4	TBC
218d	148	132	8.8-9.0	45.6-47.9	TBC
220d	187	143	7.5-7.6	45.6-48.7	TBC
225d	220	151	6.5	44.1-44.8	TBC

2 Series Active Tourer 5dr hatch £25,565–£37,550 ★★★★☆
BMW's FWD hatch is a proper contender but not as practical as some of its rivals. **LxWxH** 4342x1800x1555 **Kerb weight** 1360kg

218i	134	127	9.3	39.8-44.1	TBC
220i	181	142	7.4	37.2-38.7	TBC
225xe	248	125	6.7	88.3-100.9	TBC
216d	335	121	11.1	55.4-58.9	TBC
218d	148	129	9.0-9.1	49.6-55.4	TBC
220d	187	141	7.6	50.4-53.3	TBC
220d xDrive	187	138	7.5	47.9-51.4	TBC

2 Series Gran Tourer 5dr MPV £27,470–£37,750 ★★★★½
Brings a proper premium MPV to the table. Third row seats aren't adult-sized, though. **LxWxH** 4556x1800x1608 **Kerb weight** 1475kg

218i	134	127	9.5-9.8	38.2-40.9	TBC
220i	181	137	7.8	35.3-36.2	TBC
216d	335	119	11.8	53.3-55.4	TBC
218d	148	127	9.6	47.9-51.4	TBC
220d	187	138	8.2	47.9-49.6	TBC
220d xDrive	187	135	8.0	45.6-47.1	TBC

3 Series 4dr saloon £32,565–£48,555 ★★★★★
Latest 3 Series has a growth spurt, but size is no obstacle for an engaging drive. **LxWxH** 4709x1827x1442 **Kerb weight** 1450kg

320i	181	146	7.1	41.5-43.5	124-127
330i	254	155	5.8	38.2-41.5	134-139
330e	288	155	5.9	188.3-201.8	37-38
M340i xDrive	369	155	4.4	34.0-34.9	162
318d	148	132	8.3-8.4	52.3-55.4	109-116
320d	187	146	6.8-7.1	49.6-56.5	110-118
320d xDrive	187	144	6.9	47.1-49.6	119-121
330d	263	155	5.5	44.1-47.9	133-138
330d xDrive	263	155	5.1	42.2-47.1	136-140

3 Series Touring 5dr estate £35,235–£48,765 ★★★★½
Towering everyday appeal. Arguably the best all-rounder sensible money can buy. **LxWxH** 4620x1811x1430 **Kerb weight** 1565kg

330i	254	155	5.9	39.2-40.4	139-146
320d	188	142	7.1-7.9	49.6-50.4	115-121
320d xDrive	188	142	7.4	47.9-51.4	121-124
330d xDrive	261	155	5.4	42.8-43.5	142-146

4 Series 2dr coupé £34,805–£65,300 ★★★★☆
A talented GT and a brilliant B-road steer that is very well-equipped. **LxWxH** 4640x1825x1377 **Kerb weight** 1475kg

420i	181	146	7.3-7.5	35.3-37.7	TBC
420i xDrive	181	144	7.6-7.8	33.6-36.2	TBC
430i	248	155	5.8-5.9	34.9-37.2	TBC
440i	321	155	5.0-5.2	31.0-33.6	TBC
M4	425	155	4.1-4.3	27.7-28.5	TBC
M4 Competition pack	444	155	4.0-4.2	24.7-28.5	TBC
420d	187	146	7.2-7.4	46.3-50.4	TBC
420d xDrive	187	144	7.3	43.5-45.6	TBC
430d	254	155	5.5	40.9-42.2	TBC
430d xDrive	254	155	5.2	38.7-39.2	TBC
435d xDrive	308	155	4.7	39.2-40.4	TBC

4 Series Convertible 2dr open £41,495–£68,720 ★★★★☆
A talented gran tourer with the ability to remove the roof. What's not to like? **LxWxH** 4640x1825x1384 **Kerb weight** 1700kg

420i	181	146	8.2-8.4	34.0-35.8	TBC
430i	248	155	6.3-6.4	32.8-35.3	TBC
440i	321	155	5.4	29.7-30.4	TBC
M4	425	155	4.4-4.6	27.2-28.0	TBC
M4 Competition pack	444	155	4.3-4.5	26.9-28.0	TBC
420d	187	146	8.1-8.2	44.1-46.3	TBC
430d	254	155	5.9	39.2-39.8	TBC
435d xDrive	308	155	5.2	37.7-38.2	TBC

4 Series Gran Coupé 4dr coupé £34,755–£50,040 ★★★★☆
Essentially a prettier 3 Series. Good, but not better than the regular saloon. **LxWxH** 4640x1825x1404 **Kerb weight** 1520kg

420i	181	146	7.5-7.7	34.9-37.1	TBC
420i xDrive	181	144	7.8-8.1	33.2-25.8	TBC
430i	248	155	5.9	34.4-37.2	TBC
440i	321	155	5.1	30.7-31.7	TBC
420d	187	146	7.4-7.6	46.3-51.4	TBC
420d xDrive	187	144	7.5	43.5-46.3	TBC
430d	254	155	5.6	40.9-41.5	TBC
430d xDrive	254	155	5.3	38.2-39.2	TBC
435d xDrive	308	155	4.8	39.2-39.8	TBC

5 Series 4dr saloon £37,640–£98,100 ★★★★½
The perfect compromise between the comfy E-Class and dynamic XF, and then some. **LxWxH** 4936x2126x1479 **Kerb weight** 1530kg

520i	181	146	7.8	38.2-40.4	TBC
530i	248	155	6.2	35.8-38.2	TBC
540i xDrive	335	155	4.8	29.4-31.4	TBC
M5	592	155	3.4	23.5-24.1	TBC
M5 Competition	616	155	3.3	23.5-24.1	TBC
530e	248	146	6.2	117.7-128.4	TBC
518d	148	132	8.8	47.1-52.3	TBC
520d	187	147	7.5	44.1-52.3	TBC
520d xDrive	187	144	7.6	43.5-48.7	TBC
530d	261	155	5.7	43.5-45.6	TBC
530d xDrive	261	155	5.4	39.2-41.5	TBC

5 Series Touring 5dr estate £39,890–£55,900 ★★★★½
The excellent 5 Series made in more practical form. The 520d is still the best. **LxWxH** 4942x2126x1498 **Kerb weight** 1630kg

520i	181	139	8.2	34.9-38.2	TBC
530i	248	155	6.5	34.0-36.7	TBC
540i xDrive	335	155	5.1	28.2-30.4	TBC
520d	187	147	7.8	44.1-47.9	TBC
520d xDrive	187	144	7.9	42.2-46.3	TBC
530d	261	155	5.8	40.9-43.5	TBC
530d xDrive	261	155	5.6	37.7-41.5	TBC

6 Series Gran Turismo 5dr hatch £43,910–£59,010 ★★★½☆
A large improvement on the 5GT and dynamically sound. Still an oddball, though. **LxWxH** 5007x1894x1392 **Kerb weight** 1720kg

630i	254	155	6.3	32.1-34.9	TBC
640i xDrive	335	155	5.3	26.9-29.1	TBC
620d	198	137	7.9	42.8-46.3	TBC
620d xDrive	198	135	8.0	40.4-44.8	TBC
630d	261	155	6.1	40.4-43.5	TBC
630d xDrive	261	155	6.0	37.2-40.9	TBC

7 Series 4dr saloon £69,565–£139,120 ★★★★☆
Rules on in-car entertainment and diesel sophistication; otherwise too bland. **LxWxH** 5098x1902x1478 **Kerb weight** 1755kg

740i	338	155	5.5	31.7-34.0	TBC
750i xDrive	527	155	4.0	25.7-26.9	TBC
M760Li xDrive	583	155	3.8	20.8-21.6	TBC
730d	261	155	6.1	41.5-43.5	TBC
730d xDrive	261	155	5.8	39.2-40.9	TBC
740d xDrive	315	155	5.2	37.7-39.8	TBC
745e	283	155	5.1-5.2	104.6-141.2	TBC

8 Series 2dr coupé/2dr open £71,840–£107,220 ★★★★☆
Has dynamism to spare, but not quite the breadth of ability of the best sporting GTs. **LxWxH** 4843x1902x1341 **Kerb weight** 1830kg

840i	335	155	5.0	33.2-33.6	TBC
M850i xDrive	523	155	3.7	26.2-26.9	TBC
840d xDrive	316	155	4.9	39.2-40.4	TBC

8 Series Gran Coupé 4dr saloon £69,340–£97,720 ★★★★☆
Four-door grand tourer offers greater practicality than its two-door siblings. **LxWxH** 5072x1932x1397 **Kerb weight** 1800kg

840i	335	155	5.2	31.7-33.2	TBC
M850i xDrive	523	155	3.9	24.4-24.6	TBC
840d xDrive	316	155	5.1	38.2-39.2	TBC

X1 5dr SUV £28,795–£38,145 ★★★★☆
Pick of the premium bunch but a tad unrefined and has ordinary handling. **LxWxH** 4439x1821x1598 **Kerb weight** 1395kg

sDrive18i	138	127	9.7	39.2-40.9	TBC
sDrive20i	189	138	7.4	36.7-38.2	TBC
xDrive20i	189	TBC	7.7	34.4-35.8	TBC
sDrive18d	148	126	9.3-9.4	47.9-49.6	TBC
xDrive18d	148	126	9.3-9.4	46.3-47.9	TBC
xDrive20d	187	136	7.8	45.6-47.9	TBC

X2 5dr SUV £29,725–£44,235 ★★★★☆
Proves crossovers aren't always worse than the hatchbacks on which they're based. **LxWxH** 4360x1824x1526 **Kerb weight** 1460kg

sDrive18i	138	127	9.6	39.8-43.5	TBC
sDrive20i	189	141	7.7	37.2-39.8	TBC
xDrive20i	189	TBC	7.6	34.9-36.2	TBC
M35i	302	155	4.9	33.6-34.0	TBC
sDrive18d	148	129	9.3-9.8	47.9-52.3	TBC
xDrive18d	148	128	9.2	46.3-49.6	TBC
xDrive20d	185	137	7.7	45.6-50.4	TBC

X3 5dr SUV £40,355–£77,190 ★★★★☆
Continues where the last one left off. Dynamically good and more luxurious inside. **LxWxH** 4708x1891x1676 **Kerb weight** 1750kg

xDrive20i	181	134	8.3	29.4-31.4	TBC
M40i	355	155	4.8	25.7-26.6	TBC
X3M Competition	503	155	4.1	26.9	TBC
xDrive20d	187	132	8.0	39.2-41.5	TBC
xDrive30d	261	149	5.8	36.7-38.7	TBC
M40d	321	155	4.9	35.3-36.7	TBC

X4 5dr SUV £44,875–£80,110 ★★★½☆
Downsized X6 is respectable enough if not loveable, but the X3 is a better option. **LxWxH** 4671x1881x1624 **Kerb weight** 1735kg

M40i	336	155	4.9	25.9-26.9	TBC
X4M Competiton	503	155	4.1	26.7	TBC
xDrive20d	187	131	8.0	39.2-41.5	TBC
xDrive30d	254	145	5.8	36.7-40.9	TBC
M40d	322	155	4.9	35.3-27.2	TBC

X5 5dr SUV £57,640–£74,170 ★★★★☆
More capable, convenient, refined and classy SUV that's a more satisfying drive. **LxWxH** 4922x2004x1745 **Kerb weight** 2110kg

xDrive40i	335	155	5.5	25.0-27.2	TBC
xDrive45e	282	TBC	5.6	188.3-235.4	TBC
M50i	523	155	4.3	22.6-23.2	TBC
xDrive30d	261	130	6.8	34.0-37.7	TBC
M50d	395	155	5.3	32.5-33.6	TBC

X6 5dr SUV £59,340–£76,870 ★★★½☆
The world's first off-road coupé, but appearances make it difficult to love. **LxWxH** 4909x1989x1702 **Kerb weight** 2065kg

xDrive40i	338	155	5.5	26.4-28.5	TBC
M50i	523	155	4.3	23.0-23.5	TBC
xDrive30d	254	143	6.7	32.5-33.6	TBC
M50d	375	155	5.2	29.4-30.1	TBC

X7 5dr SUV £72,315–£90,935 ★★★★☆
BMW's largest SUV yet crowns the line-up, but faces strong competition. **LxWxH** 5151x2000x1805 **Kerb weight** 2395kg

xDrive40i	338	155	6.1	24.6-24.8	TBC
M50i	523	155	4.7	21.6-21.9	TBC
xDrive30d	262	155	7.0	32.8-33.6	TBC
M50d	398	155	5.4	31.0-31.4	TBC

i3 5dr hatch £35,350–£37,840 ★★★★½
Our favourite high-end small car happens to be an EV, and it could change motoring. **LxWxH** 3999x1775x1578 **Kerb weight** 1245kg

120Ah	167	93	7.3	TBC	0
120Ah S	180	99	6.9	TBC	0

i8 2dr coupé/roadster £115,105–£127,105 ★★★★☆
If BMW's plug-in hybrid is what the future of the sports car looks like, we welcome it. **LxWxH** 4689x1942x1293 **Kerb weight** 1485kg

1.5 eDrive	374	155	4.4-4.6	128.4	TBC

Z4 2dr coupé £37,115–£49,185 ★★★★☆
Better to drive than ever, but makes a better open-top cruiser than a true sports car. **LxWxH** 4689x1942x1293 **Kerb weight** 1485kg

sDrive20i	195	155	6.6	38.7-39.8	TBC
sDrive30i	255	155	5.4	37.7-38.7	TBC
M40i	338	155	4.6	33.2	TBC

CADILLAC

CTS-V 4dr saloon £85,428 ★★★★☆
Eat your heart out, Germany – but lacks handling finesse of its European rivals. **LxWxH** 5050x1863x1447 **Kerb weight** 1850kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.2 V8 RWD	640	199	3.7	TBC	TBC

Escalade 5dr SUV £93,260 ★★☆☆☆
Cadillac's luxury SUV remains too large and ungainly for the UK. **LxWxH** 5179x2061x1896 **Kerb weight** 2635kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.2 V8 AWD	420	112	6.7-6.9	TBC	TBC

CATERHAM

Seven 2dr open £26,490–£53,885 ★★★★½
The 360 is the sweet spot in the revised range, giving the Seven just the right hit of performance. **LxWxH** TBC **Kerb weight** 490kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 Sigma Ti-VCT 270	135	122	5.0	TBC	TBC
1.6 Sigma Ti-VCT 310	152	127	4.9	TBC	TBC
2.0 Duratec 360	180	130	4.8	TBC	TBC
2.0 Duratec 420	210	136	3.8	TBC	TBC
2.0 Supercharged 620S	310	145	3.4	TBC	TBC
2.0 Supercharged 620R	310	155	2.79	TBC	TBC

CHEVROLET

Camaro 2dr coupé/convertible £35,770–£47,850 ★★★½☆
An affordable American muscle car, but LHD only and less usable and unrefined. **LxWxH** 4784x1897 **Kerb weight** 1539kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 Turbo	268	149	5.9-6.1	TBC	TBC
6.2 V8	446	155-180	4.4-4.8	TBC	TBC

Corvette 2dr coupé/open £72,945–£100,305 ★★★½
LHD only and less usable and less able than rivals, but disarming and inimitable. **LxWxH** 4492x1872x1239 **Kerb weight** 1539kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.2 V8	459	180	4.1-4.2	TBC	TBC
6.2 V8 Z06	650	196	3.7-3.8	TBC	TBC

CITROEN

C-Zero 5dr hatchback £20,520 ★★★☆☆
Well-engineered electric city car, but too expensive and lacks the range of rivals. **LxWxH** 3475x1475x1600 **Kerb weight** 1120kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
Electric	64	80	15.9	TBC	0

C1 3dr hatch/5dr hatch £10,140–£14,110 ★★★½☆
Slightly cheaper than its Toyota sibling but less visually charming. **LxWxH** 3455x1615x1460 **Kerb weight** 855kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 VTi 72	71	99	12.6	TBC	TBC

C3 5dr hatchback £13,050–£19,310 ★★★½☆
Funky, fresh look gives a lease of life, shame that underneath isn't the same. **LxWxH** 3996x1749x1474 **Kerb weight** 976kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 82	79	107	12.8	TBC	TBC
1.2 PureTech 110	107	117	9.3	TBC	TBC
1.6 BlueHDi 100	96	115	10.6	TBC	TBC

C3 Aircross 5dr hatchback £16,655–£21,245 ★★★½☆
Funky-looking C3 gets a jacked-up, rugged SUV look. **LxWxH** 4155x1765x1637 **Kerb weight** 1088kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 82	79	103	15.9	TBC	TBC
1.2 PureTech 110	107	115	11.3	TBC	TBC
1.2 PureTech 130	127	124	10.4	TBC	TBC
1.6 BlueHDi 100	96	109	12.8	TBC	TBC

C4 Cactus 5dr hatchback £19,070–£23,335 ★★★½☆
Interesting and novel to look at but flawed to drive. **LxWxH** 4157x1729x1480 **Kerb weight** 965kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 110	107	117	9.3-9.7	TBC	TBC
1.2 PureTech 130	128	120	8.2	TBC	TBC
1.6 BlueHDi 100	96	114	10.6-11.2	TBC	TBC
1.6 BlueHDi 120	118	125	8.7	TBC	TBC

C4 Spacetourer 5dr MPV £22,780–£31,270 ★★★★☆
Plushness and an improved dynamic make for a better car. **LxWxH** 4438x1826x1610 **Kerb weight** 1280kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 130	126	125-128	10.1	TBC	TBC
1.6 BlueHDi 130	126	130	10.4	TBC	TBC
1.6 BlueHDi 160	158	131	8.9	TBC	TBC

Grand C4 Spacetourer 5dr MPV £24,880–£33,070 ★★★★☆
Alternative MPV offers something fresh, comfy, spacious and quietly upmarket. **LxWxH** 4602x1826x1638 **Kerb weight** 1297kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 130	126	125-128	10.8	TBC	TBC
1.6 BlueHDi 130	126	130	11.3	TBC	TBC
1.6 BlueHDi 160	158	130	9.2	TBC	TBC

C5 Aircross 5dr SUV £23,830–£32,730 ★★★½☆
Smooth-riding SUV has an easy-going nature, but not the most dynamic. **LxWxH** 4500x1859x1670 **Kerb weight** 1530kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 130	129	117	10.5	TBC	TBC
1.6 PureTech 180	178	134	8.2	TBC	TBC
1.5 BlueHDI 130	129	117	10.4	TBC	TBC
1.5 BlueHDI 180	174	131	8.6	TBC	TBC

Berlingo 5dr MPV £19,430–£26,650 ★★★★½
Boxy, slightly quirky and immensely practical van-based car returns to top form. **LxWxH** 4403x1921x1849 **Kerb weight** 1398kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 110	108	109	11.5	37.5-42.4	TBC
1.5 BlueHDI 75	75	95	16.5	TBC	TBC
1.5 BlueHDI 100	101	109	12.3	TBC	TBC
1.5 BlueHDI 130	128	116	10.3	TBC	TBC

CUPRA

Ateca 5dr hatch £35,900–£41,175 ★★★½☆
First model from Seat's stand-alone performance brand has decent pace and precision. **LxWxH** 4376x1841x1615 **Kerb weight** 1615kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 TSI 300	296	153	5.2	TBC	TBC

DACIA

Sandero 5dr hatch £6995–£11,595 ★★★☆☆
A clever budget prospect but its limitations are unavoidable, even after a smart facelift. **LxWxH** 4069x1733x1519 **Kerb weight** 969kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 SCe 75	71	98	14.2	TBC	TBC
0.9 TCe 90	87	109	11.1	TBC	TBC
1.5 dCi 95	93	111	11.9	TBC	TBC

Sandero Stepway 5dr hatch £9195–£12,055 ★★★½☆
A more expensive and slightly more rugged cheap car – but still limited. **LxWxH** 4089x1761x1555 **Kerb weight** 1040kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 SCe 75	73	98	15.1	TBC	TBC
0.9 TCe 90	87	104	11.1	TBC	TBC
1.5 dCi 95	93	106	13	TBC	TBC

Logan MCV 5dr estate £8495–£13,095 ★★★☆☆
Lacks its stablemates' charms but retains their cheapness. **LxWxH** 4501x1733x1552 **Kerb weight** 980kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 SCe 75	71	98	14.7	TBC	TBC
0.9 TCe 90	87	109	11.1	TBC	TBC
1.5 dCi 95	93	111	11.8	TBC	TBC

Logan MCV Stepway 5dr estate £12,695–£15,155 ★★★☆☆
Given a rugged makeover but still lacks charm. Extremely practical, though. **LxWxH** 4528x1761x1559 **Kerb weight** 1090kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
0.9 TCe 90	87	106	12.4	TBC	TBC
1.5 dCi 95	93	111	13.0	TBC	TBC

Duster 5dr SUV £10,995–£19,955 ★★★½☆
A value champion. If cheap family transport is what you require, the Duster delivers. **LxWxH** 4315x2000x1625 **Kerb weight** 1147kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TCe 100 4x2	99	105	12.5	TBC	TBC
1.3 TCe 130 4x2	128	118	11.1	TBC	TBC
1.3 TCe 150 4x4	148	121	10.6	TBC	TBC
1.5 dCi 115 4x2	111	111	10.5	TBC	TBC
1.5 dCi 115 4x4	111	108	12.1	TBC	TBC

DS

3 3dr hatch/2dr open £19,480–£23,480 ★★★★☆
Premium-brand philosophy and aesthetics appeal, but the 3 lacks dynamic refinement. **LxWxH** 3948x1715x1483 **Kerb weight** 1090kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 110	107	117-118	9.6-10.2	39.1-44.8	TBC

3 Crossback 5dr SUV £24,555–£34,705 ★★★½☆
First foray into compact SUVs comfortably competes with more established rivals. **LxWxH** 4118x1802x1534 **Kerb weight** 1205kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 100	98	112	10.9	46.0-52.0	TBC
1.2 PureTech 130	128	124	9.2	42.2-47.1	TBC
1.2 PureTech 155	153	129	8.2	41.7-45.7	TBC
1.5 BlueHDI 100	98	112	11.4	54.4-62.7	TBC

7 Crossback 5dr SUV £27,435–£44,120 ★★★½☆
DS's first premium SUV certainly has the right price tag, equipment and appeal. **LxWxH** 4570x1895x1620 **Kerb weight** 1420kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 130	129	122	10.2	42.2-48.0	TBC
1.6 PureTech 180	178	137	8.9	35.2-38.5	TBC
1.6 PureTech 225 EAT8	218	141	8.3	33.6-36.5	TBC
1.5 BlueHDi 130	TBC	121	11.7	49.3-55.3	TBC
2.0 BlueHDi 180 EAT8	171	134	9.9	42.7	TBC

FERRARI

Portofino 2dr open £166,551 ★★★★☆
The entry-level Ferrari has the power, the looks and the touring ability. **LxWxH** 4586x1938x1318 **Kerb weight** 1664kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.9T V8	591	199	3.5	14.7-28.0	230-436

488 2dr coupé/open £197,418–£278,850 ★★★★★
Calm ride mixed with explosive performance. **LxWxH** 4568x1952x1213 **Kerb weight** 1475kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.9T V8 GTB	650	203-205	3.0	13.5-25.9	247-478
3.9T V8 Pista	710	212	2.85	15-26.2	245-430
3.9T V8 Pista Spider	710	211	2.85	15-26.2	245-430

F8 Tributo 2dr coupé £203,476 ★★★★★
The last hurrah for the pure internal combustion V8-powered mid-engined Ferrari. **LxWxH** 4611x1979x1206 **Kerb weight** 1435kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.9T V8 Tributo	710	211	2.9	TBC	TBC

GTC4 Lusso 2dr coupé £200,890–£243,126 ★★★★½
Another four-wheel-drive grand tourer Ferrari that is more usable than the FF. **LxWxH** 4922x1980x1383 **Kerb weight** 1865kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.9T V8	592	198	3.5	13.5-25.2	253-477
6.3 V12	670	208	3.4	9.9-21.0	308-648

812 Superfast 2dr open £263,033 ★★★★★
More powerful than the F12, but with better road manners making it the star of the range. **LxWxH** 4657x1971x1276 **Kerb weight** 1630kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.5 V12	777	211	2.9	11.2-20.0	320-572

FIAT

500 3dr hatch/2dr open £12,165–£20,995 ★★★½☆
Super desirable, super-cute city car. Pleasant, if not involving to drive. **LxWxH** 3571x1627x1488 **Kerb weight** 865kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 69hp	68	99	12.9	44.1	TBC
0.9 Twinair 85	83	107	11.0	49.6	TBC

500L 5dr MPV £17,910–£18,210 ★★★☆☆
A costly option but has some style to fill out some of its missing substance. **LxWxH** TBC **Kerb weight** TBC

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 95hp	93	103-111	12.8-13.2	34.0-34.9	TBC

500X 5dr hatch £18,500–£24,700 ★★★½☆
Familiar styling works rather well as a crossover. Drives okay, too. **LxWxH** 4248x1796x1600 **Kerb weight** TBC

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 E-Torq 110	108	112	11.5	36.7	TBC
1.0 Firefly Turbo 120hp	118	117	10.9	41.5	TBC
1.3 Firefly Turbo 150hp	148	124	9.1	40.9	TBC

Panda 5dr hatch £10,080–£16,580 ★★★½☆
Hasn't kept pace with its rivals, but sells robust, practical charm better than most. **LxWxH** 3653x1643x1551 **Kerb weight** 940kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 69hp	68	96-102	14.2-14.5	44.8	TBC
0.9 Twinair 85	83	103-110	11.2-12.1	37.2	TBC

Tipo 5dr hatch £14,905–£19,575 ★★★½☆
A 90s reboot that has been on a diet. Decent to drive and ample interior space. **LxWxH** 4368x1792x1495 **Kerb weight** 1195kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 95	93	115	12.1	36.2-36.7	TBC
1.4 T-Jet 120	118	124	9.6	36.7	TBC
1.6 Multijet II 120	118	124	9.8-10.2	48.7-51.4	TBC

Tipo Station Wagon 5dr estate £15,905–£17,905 ★★★½☆
Estate version is more practical, which mixes well with its driving characteristics. **LxWxH** 4571x1792x1514 **Kerb weight** 1205kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 95	93	115	12.3	36.2	TBC
1.4 T-Jet 120	118	124	9.8	34.4-36.7	TBC
1.6 Multijet II 120	118	124	10.1-10.4	48.7-50.4	TBC

FORD

Ka+ 5dr hatch £11,300–£15,050 ★★★½☆
The Ka gets two extra doors, and it's a breath of fresh air for the range. **LxWxH** 3929x1910x1524 **Kerb weight** 1055kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 Ti-VCT 70	69	99	15.3	48.7	TBC
1.2 Ti-VCT 85	83	105	13.3	43.5-47.9	TBC
1.5 TDCi 95	93	111	11.4	56.5-60.1	TBC

Fiesta 3dr/5dr hatch £15,995–£26,495 ★★★★½
Dynamically superb and continues the Fiesta legacy. No longer the class leader, though. **LxWxH** 4040x1735x1476 **Kerb weight** 1113kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.1 Ti-VCT 85	83	105	14.0	44.8-48.7	TBC
1.0T Ecoboost 100	98	111-113	10.5-12.2	40.4-50.4	TBC
1.0T Ecoboost 125	123	121	9.9	46.3-49.6	TBC
1.0T Ecoboost 140	138	125	9.0	46.3-48.7	TBC
1.5T Ecoboost 200 ST	197	144	6.5	40.4	TBC
1.5 TDCi Duratorq 85	83	108	12.5	55.4-60.1	TBC

Focus 5dr hatch £18,545–£31,995 ★★★★½
Better to drive and look at than before, and impressively good value. **LxWxH** 4378x1825x1471 **Kerb weight** 1369kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0T Ecoboost 85	84	110	13.5	44.1-49.6	TBC
1.0T Ecoboost 100	99	116	12.1	44.1-50.4	TBC
1.0T Ecoboost 125	123	119-124	10-11.7	37.7-49.6	TBC
1.5T Ecoboost 150	148	127-130	8.8-9.7	38.2-46.3	TBC
1.5T Ecoboost 182	180	137-138	8.3-8.4	38.7-44.1	TBC
2.3T Ecoboost 280 ST	276	155	5.7	34.3	179
1.5 EcoBlue 95	94	114	11.4	56.5-64.2	TBC
1.5 EcoBlue 120	118	117-122	10.0-10.8	49.6-62.8	TBC
2.0 EcoBlue 150	148	127-130	8.5-9.3	44.1-57.6	TBC

Focus Estate 5dr estate £19,645–£33,095 ★★★½☆
Almost as good to drive as the hatch, but a Skoda Octavia will carry more. **LxWxH** 4669x1825x1481 **Kerb weight** 1485kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0T Ecoboost 85	84	109	13.9	44.1-49.6	TBC
1.0T Ecoboost 100	99	115	12.7	44.1-50.4	TBC
1.0T Ecoboost 125	123	119-120	11.2-12.2	37.7-49.6	TBC
1.5T Ecoboost 150	148	129-130	8.9-9.2	38.2-46.3	TBC
1.5T Ecoboost 182	180	137-138	8.8	38.7-44.1	TBC
2.3T Ecoboost 280 ST	276	155	5.9	TBC	TBC
1.5 EcoBlue 95	94	112	11.8	56.5-64.2	TBC
1.5 EcoBlue 120	118	116-120	10.3-11.1	49.6-62.8	TBC
1.5 EcoBlue 150	148	126-129	8.7-9.5	44.1-57.6	TBC

Mondeo 5dr hatch £21,495–£32,595 ★★★★☆
Does what great Fords do, by over-delivering on practicality, handling and value. **LxWxH** 4871x1852x1482 **Kerb weight** 1455kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 SCTi Ecoboost 165	162	133-138	9.1-9.2	22.8-41.5	TBC
2.0 TiVCT hybrid 187	184	116	9.2	40.9-52.3	TBC
2.0 TDCi Duratorq 150	148	131-133	10.7-10.9	36.7-61.4	TBC
2.0 TDCi Duratorq 180	177	138	9.9	36.7-56.5	TBC
2.0 TDCi D'torq 180 AWD	177	137	10.0	34.9-52.3	TBC

Mondeo Estate 5dr estate £23,295–£34,095 ★★★★☆
A vast and enjoyable estate that majors on everything a great Ford should. **LxWxH** 4867x1852x1501 **Kerb weight** 1476kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 SCTi Ecoboost 165	162	135	9.2-9.3	22.8-41.5	TBC
2.0 TIVCT hybrid 187	184	116	9.2	40.9-52.3	TBC
2.0 TDCi Duratorq 150	148	128-130	10.8-11.1	36.7-61.4	TBC
2.0 TDCi Duratorq 180	177	138	9.9	36.7-56.5	TBC
2.0 TDCi D'torq 180 AWD	177	137	10.0	34.9-52.3	TBC

Mustang 2dr coupé/open £38,795–£51,045 ★★★★☆
American muscle built for the UK. What's not to like? **LxWxH** 4784x1916x1381 **Kerb weight** 1653kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.3 Ecoboost	286	145	5.8	30.1-32.5	TBC
5.0 V8	444	155	4.8	23.2-25.7	TBC
5.0 V8 Bullitt	453	163	4.6	23.9	TBC

C-Max 5dr MPV £22,300–£28,795 ★★★½☆
A fun-to-drive and easy-to-live-with five-seat MPV. **LxWxH** 4379x1828x1610 **Kerb weight** 1391kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0T Ecoboost 100	98	108	12.6	37.2-42.2	TBC
1.0T Ecoboost 125	123	116	11.4	37.2-42.2	TBC
1.5T Ecoboost 150	148	134	10.2	30.4-33.6	TBC
1.5 TDCi Duratorq 120	118	113-114	11.3-12.4	41.5-48.7	TBC

Grand C-Max 5dr MPV £23,900–£30,460 ★★★★☆
Mid-sized Ford handles well and can be had in five- or seven-seat form. Good value, too. **LxWxH** 4379x1828x1610 **Kerb weight** 1493kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0T Ecoboost 100	98	107	13.6	37.2-39.8	TBC
1.0T Ecoboost 125	123	115	12.2	37.2-39.8	TBC
1.5T Ecoboost 150	148	123	10.2	30.4-32.1	TBC
1.5 TDCi Duratorq 120	118	111-112	12.3-13.4	41.5-45.6	TBC

S-Max 5dr MPV £30,490–£42,470 ★★★★☆
Better to drive and better looking than most but not quite the class leader it was. **LxWxH** 4976x1916x1655 **Kerb weight** 1645kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 TDCi EcoBlue 150	148	123	10.3	34.0-53.3	TBC
2.0 TDCi EcoBlue 190	188	129	9.5	35.8-48.7	TBC
2.0 TDCi EcoBlue 190 AWD	188	128	9.8	31.7-46.3	TBC

Galaxy 5dr MPV £33,210–£39,070 ★★★½☆
Huge seven-seat MPV. Easy to place on the road but not cheap to buy. **LxWxH** 4848x1916x1747 **Kerb weight** 1708kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 TDCi EcoBlue 150	148	122-123	10.9	33.6-52.3	TBC
2.0 TDCi EcoBlue 190	188	129-131	9.6-9.8	35.8-52.3	TBC
2.0 TDCi EcoBlue 190 AWD	188	128	10.6	31.7-44.8	TBC

EcoSport 5dr SUV £17,850–£23,000 ★★★☆☆
Facelifted version of the pumped-up Fiesta is okay, but developing-world roots show. **LxWxH** 4096x1765x1653 **Kerb weight** 1280kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0T Ecoboost 100	98	105	11.9	39.8-44.1	TBC
1.0T Ecoboost 125	123	111	11.0-11.6	34.4-44.1	TBC
1.0T Ecoboost 140	138	115	10.2	39.8-43.5	TBC
1.5 TDCi EcoBlue 100	99	105	13.6	48.7-56.5	TBC

Kuga 5dr SUV £23,375–£37,200 ★★★★½
Bigger and sharper-looking than before but still retains its taut, responsive handling. **LxWxH** 4524x1838x1689 **Kerb weight** 1560kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 Ecoboost 120	118	112	12.5	34.9-35.3	TBC
1.5 Ecoboost 150	148	121	9.7	28.2-35.3	TBC
1.5 Ecoboost 176 AWD	174	124	10.1	28.5-29.1	TBC
1.5 TDCi 120	118	106-108	12.4-12.7	44.1-46.3	TBC
1.5 TDCi 150	148	119-121	9.9-10.1	37.2-39.2	TBC
1.5 TDCi 180 AWD	177	124-126	9.2-10.0	35.3-38.7	TBC

Edge 5dr SUV £37,020–£46,035 ★★★½☆
Mid-sized, US-developed SUV joins Ford's fleet to take on Europe's big SUVs. **LxWxH** 4808x1928x1692 **Kerb weight** 1912kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 EcoBlue 150	148	129	11.2	38.2-42.2	TBC
2.0 EcoBlue 238	235	134	9.6	34.4-41.5	TBC

GT 2dr coupé £420,000 ★★★★☆
The GT is back as a race car for the road. Compelling if not perfect. **LxWxH** 4808x1928x1692 **Kerb weight** 1912kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.5 V6 Ecoboost	650	216	3.0	TBC	TBC

Ranger 4dr pick-up £25,924–£48,784 ★★★★☆
Capable pick-up becomes off-road monster in Raptor spec, but loses VAT incentives. **LxWxH** 5277x1977x1703 **Kerb weight** 1866kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 EcoBlue 130	128	106	13.5	42.8	173
2.0 EcoBlue 170	158	109	11.8	40.4-43.5	184-207
2.0 EcoBlue 213	210	106	10.5	TBC	201-233
3.2 Duratorq TDCI 200	197	109	10.6	32.1-36.2	221-231

GINETTA

G40 Club Car 2dr coupé £35,000 (+champ pack) ★★★½☆
A balanced, affordable and fine-looking track-day car. Some of the finish isn't quite up to snuff. **LxWxH** TBC **Kerb weight** 840kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.8 Zetec	135	125	TBC	TBC	TBC

HONDA

Jazz 5dr hatch £14,600–£19,810 ★★★★☆
Not the most compact or vivacious but has decent handling and is cleverly packaged. **LxWxH** 3995x1694x1550 **Kerb weight** 1066kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.3 i-VTEC	99	113-118	11.2-12.3	48.7	TBC
1.5 i-VTEC	128	113-118	8.7-10.1	42.8	TBC

Civic 5dr hatch £19,305–£34,075 ★★★★☆
A fresh look while remaining practical, refined and upmarket. Lacks some dynamism. **LxWxH** 4518x1799x1434 **Kerb weight** 1275kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 VTEC Turbo 126PS	124	125-126	10.2-11.2	47.9	TBC
1.5 VTEC Turbo 182PS	179	125-136	8.2-8.5	46.3	TBC
1.6 i-DTEC 120PS	118	125	10.1	62.8	TBC
2.0 VTEC Turbo Type R	315	169	5.8	33.2	TBC

Civic 4 door 4dr saloon £19,905–£28,155 ★★★★☆
Saloon bodystyle gives Civic a more upmarket feel, without hurting its refined drive. **LxWxH** 4648x1799x1416 **Kerb weight** 1314kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 VTEC Turbo 126PS	124	130	10.7	47.9	TBC
1.6 i-DTEC 120PS	118	125	9.9	64.2	TBC

HR-V 5dr SUV £20,040–£29,615 ★★★½☆
Cleverly packaged and comfortable. Bland performance and forgettable, though. **LxWxH** 4294x1772x1605 **Kerb weight** 1241kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 i-VTEC 130PS	128	116-119	10.2-11.4	42.2	TBC
1.5 i-VTEC Turbo 182PS	180	134	7.8	47.1-47.9	TBC
1.6 i-DTEC	120	119	10.0	54.3-56.5	TBC

CR-V 5dr SUV £26,310–£38,830 ★★★★☆
Tardis-like SUV stalwart has lots of space for five and a big boot. **LxWxH** 4605x1820x1685 **Kerb weight** 1515kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 i-VTEC	171	130	9.3	38.7	TBC
1.5 i-VTEC AWD	171	124-129	9.8-10.0	32.5-36.2	TBC
2.0 i-MMD hybrid	181	112	9.2	40.9	TBC

NSX 2dr coupé £144,755 ★★★★½
Honda's supercar given a modern reboot, and it's some piece of engineering. **LxWxH** 4487x1939x1204 **Kerb weight** 1725kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.5 V6 hybrid	573	191	2.9	TBC	TBC

HYUNDAI

i10 5dr hatch £9895–£14,425 ★★★★☆
Prioritises maturity over fun, resulting in a car that is practical and well-priced. **LxWxH** 3665x1660x1500 **Kerb weight** 933kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 DOHC	64	97	14.7	50.4	TBC
1.2 DOHC	84	103-109	12.1-13.8	40.9-46.3	TBC

i20 5dr hatch £13,995–£18,645 ★★★★☆
Combines decent performance with good practicality and running costs. **LxWxH** 4035x1734x1474 **Kerb weight** 980kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDI 100	98	113-117	10.8-11.4	47.9-49.6	TBC
1.0 T-GDI 120	118	118	10.2	46.3	TBC
1.2 MPI 75	74	99	13.6	46.3	TBC
1.2 MPI 84	83	106	12.8	45.6-46.3	TBC

i30 5dr hatch £17,125–£29,495 ★★★½☆
As good as we've come to expect from Hyundai, but not one inch better. **LxWxH** 4340x1795x1455 **Kerb weight** 1194kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDi 120	118	118	11.1	45.6	TBC
1.4 T-GDi 140	138	127-130	8.9-9.2	42.2-46.3	TBC
1.6 CRDi 115	113	118	11.0-11.2	58.9-60.1	TBC
2.0 T-GDi 250 N	247	155	6.4	34.9	TBC
2.0 T-GDi 275 N Performance	272	155	6.1	34.0	TBC

i30 Fastback 4dr saloon £20,435–£29,995 ★★★½☆
Combines good looks with sensible practicalities and dynamic charm. **LxWxH** 4455x1795x1425 **Kerb weight** 1287kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDi 120	118	117	11.5	54.3	TBC
1.4 T-GDI 140	138	129	9.2	49.6-52.3	TBC
2.0 T-GDI 275 N	272	155	6.1	34.0	TBC

i30 Tourer 5dr estate £17,625–£26,125 ★★★½☆
Another solid car. Good value and practical but lacks excitement. **LxWxH** 4585x1795x1465 **Kerb weight** 1245kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDi 120	118	117	11.4	47.9-49.6	TBC
1.4 T-GDi 140	138	126-129	9.2-9.5	44.8-46.3	TBC
1.6 CRDi 110	108	117	11.3	58.9-60.1	TBC
1.6 CRDi 136	134	123	10.9	56.5-57.6	TBC

i40 4dr saloon £22,995–£29,125 ★★★½☆
Useful, inoffensive and well-priced, but don't expect any fireworks. **LxWxH** 4745x1815x1470 **Kerb weight** 1497kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 GDI 135	133	122	11.5	39.2	TBC
1.6 CRDi 115	113	117	12.0	56.6	TBC
1.6 CRDi 136	134	122	10.8-11.5	54.3	TBC

i40 Tourer 5dr estate £21,610–£29,630 ★★★½☆
A practical estate but still rather dull and ordinary. **LxWxH** 4775x1815x1470 **Kerb weight** 1514kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 GDI 135	133	121	11.6	38.2	TBC
1.6 CRDi 115	113	116	12.2	54.6	TBC
1.6 CRDi 136	134	121-122	11.0-11.7	52.3	TBC

Ioniq 5dr hatch £21,790–£32,045 ★★★½☆
First attempt at electrification for the masses is a good effort. **LxWxH** 4470x1820x1450 **Kerb weight** 1370kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 Hybrid 141	139	115	10.8-11.1	61.4-62.8	TBC
1.6 Plug-in Hybrid 141	139	110	10.6	247.8	TBC
Electric Motor	118	103	10.2	TBC	0

ix20 5dr hatch £15,750–£19,200 ★★★½☆
Usable high-roofed hatch is short on overall flair. **LxWxH** 4120x1765x1600 **Kerb weight** 1267kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 125	123	112	11.5	34.3-37.1	TBC

Kona 5dr hatch £17,100–£38,645 ★★★★☆
Hyundai's first crossover is the perfect blend of practicality, value and style. **LxWxH** 4165x1800x1550 **Kerb weight** 1233kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDi 120 2WD	118	112	12.0	44.1-44.8	TBC
1.6 T-GDi 177PS 4WD	175	127	7.9	34.0-33.6	TBC
1.6 CRDi 115 2WD	113	114	10.7	55.4-56.5	TBC
1.6 CRDi 136 2WD	134	119	10.2	52.3	TBC
Electric 39kWh	134	96	9.6	TBC	0
Electric 64kWh	201	104	7.6	TBC	0

Nexo 5dr SUV £65,995 ★★★½☆
Impressive effort that heads in the right direction for fuel cell cars. **LxWxH** 4670x2060x1640 **Kerb weight** 1814kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
95kW fuel cell	161	130	9.6	42mpkg	0

Tucson 5dr SUV £22,045–£34,945 ★★★½☆
Classy, roomy cabin and predictable handling. A very competitive SUV. **LxWxH** 4475x1850x1650 **Kerb weight** 1379kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 GDi 132PS	130	113	11.5	35.3	TBC
1.6 T-GDi 177PS	175	125-126	8.9-9.2	34.9-36.2	TBC
1.6 CRDi 115PS	113	109	13.7	48.7-49.6	TBC
1.6 CRDi 136PS	134	114-116	10.6-12.0	45.6-47.1	TBC
2.0 CRDi 185PS	182	125	9.5	40.9	TBC

Santa Fe 5dr SUV £33,425–£43,295 ★★★½☆
Another big Korean SUV with lots of space for not a lot of cash. Slick and comfy. **LxWxH** 4700x1880x1675 **Kerb weight** 1939kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.2 CRDi 200	197	127	9.3-9.4	38.7-43.5	TBC
2.2 CRDI 200 AWD	197	127	9.4-9.5	38.7-40.4	TBC

JAGUAR

XE 4dr saloon £31,505–£45,640 ★★★★½
Tops the pile thanks to outstanding driver appeal. Poised and engaging but refined. **LxWxH** 4672x1967x1416 **Kerb weight** 1450kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0d 163	160	132-133	8.3-8.9	47.8-50.7	TBC
2.0d 180	177	140	7.6-7.9	45.7-51.1	TBC
2.0d 180 AWD	177	140	7.8	40.8-44.7	TBC
2.0d 240 AWD	236	155	6.1	38.9-42.5	TBC
2.0t 200	197	148	7.2	32.5-35.1	TBC
2.0t 250	246	155	6.2	32.6-25.1	TBC
2.0t 300 AWD	295	155	5.4	30.0-33.2	TBC

XF 4dr saloon £34,950–£53,035 ★★★★½
Outstandingly broad-batted dynamically, plus a pleasant cabin. **LxWxH** 4954x1987x1457 **Kerb weight** 1545kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0d 163	160	132	8.7	46.1-50.4	TBC
2.0d 180	177	136	8.0-8.1	44.8-50.9	TBC
2.0d 180 AWD	177	136	8.4	40.2-44.4	TBC
2.0d 240 AWD	236	153	6.5	38.5-42.7	TBC
3.0d V6 300	295	155	6.2	40.8-43.2	TBC
2.0t 250	246	152	6.6	31.5-34.4	TBC
2.0t 300 AWD	295	155	5.8	29.9-32.6	TBC

XF Sportbrake 5dr estate £37,390–£55,035 ★★★★½
Superb XF is now available in the more practical Sportbrake form. It's a win-win. **LxWxH** 4954x1987x1496 **Kerb weight** 1660kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0d 163	160	136	9.3-9.4	45.8-48.2	TBC
2.0d 180	177	138	8.8	44.0-48.4	TBC
2.0d 180 AWD	177	136	8.9	39.3-43.1	TBC
2.0d 240 AWD	236	150	6.7	37.8-41.5	TBC
3.0d V6 300	295	155	6.6	40.1-42.1	TBC
2.0t 250	246	150	7.1	30.8-33.3	TBC
2.0t 300	295	155	6.1	28.9-31.0	TBC

XJ 4dr saloon £62,360–£83,105 ★★★★☆
Mixes dynamism and refinement so well, but not as spacious or cosseting as some. **LxWxH** 5130x1899x1460 **Kerb weight** 1835kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0d V6 300	295	155	6.2	35.7-36.3	TBC

F-Type 2dr coupé £51,925–£113,085 ★★★★½
A full-blooded assault on Porsche's backyard, with noise, power and beauty. **LxWxH** 4482x1923x1311 **Kerb weight** 1525kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0t 300	295	155	5.7	30.3-31.2	TBC
3.0s V6 340	335	161	5.3-5.7	25.1-28.3	TBC
3.0s V6 380	374	171	4.9-5.5	24.6-26.6	TBC
3.0s V6 380 AWD	374	171	5.1	25.0-25.3	TBC
5.0s V8 550 R AWD	542	186	4.1	25.7-25.9	TBC
5.0s V8 575 SVR AWD	567	200	3.7	25.5	TBC

F-Type Convertible 2dr open £57,405–£118,575 ★★★★½
Costs serious money, but you get a serious car with a likeable wild side. **LxWxH** 4482x1923x1308 **Kerb weight** 1545kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0t 300	295	155	5.7	30.4-31.1	TBC
3.0s V6 340	335	161	5.3-5.7	27.4-27.9	TBC
3.0s V6 380	374	171	4.9-5.5	25.9-26.2	TBC
3.0s V6 380 AWD	374	171	5.1	25.0-25.4	TBC
5.0s V8 550 R AWD	542	186	4.1	25.7-26.0	TBC
5.0s V8 575 SVR AWD	567	195	3.7	25.5	TBC

E-Pace 5dr SUV £28,930–£46,060 ★★★★☆
Jaguar's second SUV looks enticing, but can it make an impact like the F-Pace's? **LxWxH** 4411x1984x1649 **Kerb weight** 1775kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 D150	148	124	9.5	39.1-42.6	TBC
2.0 D150 AWD	148	120	9.9-10.1	36.3-41.7	TBC
2.0 D180 AWD	177	127-128	8.7-9.4	36.1-41.1	TBC
2.0 D240 AWD	236	139	7.0	34.5-36.9	TBC
2.0 P200 AWD	198	134	7.7	27.8-30.1	TBC
2.0 P250 AWD	245	143	6.6	27.1-29.5	TBC
2.0 P300 AWD	295	151	5.9	26.2-28.1	TBC

F-Pace 5dr SUV £36,520–£74,835 ★★★★☆
Credible first SUV effort is as refined and dynamic as a Jaguar should be. **LxWxH** 4746x2070x1667 **Kerb weight** 1690kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0d 163	160	121	10.2	40.9-44.8	TBC
2.0 20d 180	177	129	8.5	39.9-43.4	TBC
2.0 20d 180 AWD	177	129	8.7	36.8-40.0	TBC
2.0 25d 240 AWD	236	135	7.2	35.4-38.5	TBC
3.0 V6 30d 300 AWD	295	150	6.2	34.2-36.6	TBC
2.0 25t 250 AWD	246	135	6.8	27.2-29.2	TBC
2.0 30t 300 AWD	295	145	6.0	26.2-28.0	TBC
5.0 V8 SVR 550 AWD	548	176	4.1	22.1	TBC

I-Pace 5dr SUV £64,495–£74,995 ★★★★½
Fast, refined and the first of its kind from a European manufacturer. **LxWxH** 4682x1895x1558 **Kerb weight** 2133kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
EV400	398	124	4.5	TBC	0

JEEP

Compass 5dr SUV £23,755–£35,325 ★★★☆☆
Wants to be a catch-all crossover, but is beaten by more road-focused rivals. **LxWxH** 4394x2033x1629 **Kerb weight** 1430kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 Multiair II 140	138	119	9.9	TBC	TBC
1.4 Multiair II 170 4WD	167	124	9.5	TBC	TBC
1.6d MultiJet II 120	118	115	11.0	TBC	TBC
2.0d MultiJet II 140 4WD	138	118	10.1	TBC	TBC
2.0d MultiJet II 170 4WD	167	122	9.5	TBC	TBC

Renegade 5dr SUV £23,500–£31,400 ★★★½☆
Middling compact crossover with chunky looks but no obvious charm. **LxWxH** 4236x1805x1667 **Kerb weight** 1346kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 GSE T3 120	118	115	11.2	38.2	TBC
1.3 GSE T4 150	148	122	9.4	38.2-39.8	TBC
1.6d MultiJet II 120	118	111	10.2	45.6-48.7	TBC
2.0d MultiJet II 140 4WD	138	113	9.5-10.2	37.7-40.4	TBC
2.0d MultiJet II 170 4WD	167	122	8.9	35.8	TBC

Cherokee 5dr SUV £35,750 ★★½☆☆
Hamstrung by poor UK specification. Uninspiring but practical and roomy. **LxWxH** 4624x1859x1670 **Kerb weight** 1738kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.2d MultiJet 185 4WD	182	127	8.8	TBC	TBC

Grand Cherokee 5dr SUV £49,880 ★★★½☆
The best Jeep on sale by some margin. Comfortable and well-equipped. **LxWxH** 4828x1943x1792 **Kerb weight** 2266kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 MultiJet 250 4WD	247	126	8.2	TBC	TBC

Wrangler 2dr/4dr SUV £44,865–£48,365 ★★★★☆
Heavy-duty off-roader goes anywhere, but lacks on-road manners. **LxWxH** 4223x1873x1840 **Kerb weight** 1827kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.2d MultiJet II 200 4WD	197	114	9.5	28.8-30.4	TBC

KIA

Picanto 5dr hatch £9720–£14,720 ★★★☆☆
Nice drive and cabin, but now overshadowed by rivals. **LxWxH** 3595x1406x1485 **Kerb weight** 935kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 MPi	66	100	13.8	49.6-50.4	127-129
1.0 T-GDi	99	112	10.1	48.7	133
1.25 MPi	83	100-107	11.6-13.2	42.2-49.6	129-151

Rio 5dr hatch £12,220–£18,010 ★★★½☆
Looks great and is well-priced, but nowhere near its European rivals. **LxWxH** 4065x1725x1445 **Kerb weight** 1155kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDi 99	99	115	10.3	48.7	132-133
1.0 T-GDi 118	118	118	9.8	44.8-47.1	137-142
1.25 MPi	83	107	12.5	45.6-46.3	138-140
1.4 MPi	98	103-108	11.8-13.4	42.2-46.3	138-151

Ceed 5dr hatch £18,295–£27,185 ★★★★☆
Third-generation hatchback can now compete for class honours. **LxWxH** 4310x1800x1447 **Kerb weight** 1315kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDi 118	118	116	10.9	47.9-50.4	127-134
1.4 T-GDi 138	138	128-130	8.6-8.9	43.5-46.3	139-148
1.6 T-GDI 201	201	142	7.5	38.2	169
1.6 CRDi 114	114	118	10.6	57.6-58.9	126-129
1.6 CRDI 134	134	122	10.2	57.6	129

Ceed Sportswagon 5dr estate £19,295–£28,600 ★★★★☆
All of the above, but with cavernous, more practical load space. **LxWxH** 4600x1800x1465 **Kerb weight** 1389kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 T-GDi 118	118	118	10.9	47.1	136-137
1.4 T-GDi 138	138	128-130	8.8-9.1	44.1-45.6	141-146
1.6 CRDi 114	114	119	10.7	56.5-58.9	127-132

Proceed 5dr hatch £23,840–£28,140 ★★★½☆
Alluring and interesting, but not quite as special to drive as it looks. **LxWxH** 4605x1800x1422 **Kerb weight** 1405kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 T-GDI 138	138	127-130	8.8-9.1	42.8-45.6	142-150
1.6 T-GDI 201	201	140	7.2	39.3	163
1.6 CRDI 134	134	124	9.8-10.0	54.3-56.5	132-136

Soul 5dr hatch £14,725–£30,495 ★★★½☆
Looks divide opinion. Better value now but still hardly the best option. **LxWxH** 4140x1800x1600 **Kerb weight** 1275kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 GDi 130	130	115	10.6	TBC	TBC
1.6 T-GDi 201	201	122	7.5	TBC	TBC
1.6 CRDi 134	134	112-113	10.7-10.8	TBC	TBC
27kWh Electric Drive	109	90	11.0	TBC	0

Optima 4dr saloon £22,260–£25,700 ★★★☆☆
Looks the part but is well off the pace set by its European rivals. **LxWxH** 4855x1860x1465 **Kerb weight** 1590kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 CRDi 134	134	121-122	10.6-11.2	53.3-54.3	137-139

Optima Sportswagon 5dr estate £23,100–£38,995 ★★★☆☆
Engine and finish leave it well behind rival European estates. **LxWxH** 4855x1860x1465 **Kerb weight** 1620kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 CRDi 134	134	124	9.8-10.7	51.4-52.3	140-143
2.0 T-GDi 241	241	144	7.3	30.4	211
2.0 GDi PHEV	202	119	9.1	188.3	34

Stinger 4dr saloon £32,435–£40,535 ★★★½☆
Sleek coupé-shaped saloon has the appeal and dynamics to rival Europe's best. **LxWxH** 4830x1870x1400 **Kerb weight** 1717kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 T-GDi	244	149	5.8	29.4	217
3.3 V6 T-GDi	365	168	4.7	27.7	233
2.2 CRDi	197	143	7.3	40.9	179

Venga 5dr hatch £15,625–£19,520 ★★★☆☆
A versatile interior, but firm ride and high price disappoint. **LxWxH** 4075x1765x1600 **Kerb weight** 1253kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6	123	111-115	10.4-11.1	34.4-37.2	172-187

Carens 5dr MPV £19,505–£28,445 ★★★½☆
Nicely up to scratch without feeling cheap or austere, but no class leader. **LxWxH** 4525x1805x1605 **Kerb weight** 1483kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 GDi	133	115	10.9	TBC	TBC
1.7 CRDi 114	114	110	12.7	TBC	TBC
1.7 CRDi 139	139	117-120	10.0-10.9	TBC	TBC

Niro 5dr SUV £23,490–£30,845 ★★★½☆
Kia's first full hybrid is a solid attempt, but it lacks the refinement of better rivals. **LxWxH** 4355x1805x1545 **Kerb weight** 1500kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 GDi Hybrid	139	101	11.1	TBC	TBC
1.6 GDi Hybrid PHEV	139	107	10.4	TBC	TBC

Stonic 5dr SUV £16,540–£21,200 ★★★½☆
Kia's first crossover is striking and reasonably good considering the value. **LxWxH** 4140x1760x1520 **Kerb weight** 1160kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 MPI	98	107	12.2	45.6	141
1.0 T-GDi	118	115	9.9	46.3-47.1	137-138
1.6 CRDI	108	112	10.9	57.6	128

Sportage 5dr SUV £20,305–£34,545 ★★★½☆
Good ride, handling and usability. Looks good and is decent value. **LxWxH** 4480x1855x1635 **Kerb weight** 1454kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 GDi	130	113	11.1	34.9-35.7	179-184
1.6 T-GDi	174	127	8.9	34.4-34.9	184-187
1.6 T-GDI AWD	174	125-126	8.8-9.2	31.7-32.5	198-203
1.6 CRDi 114	114	109	11.4	49.6	150
1.6 CRDi 134	134	112	10.8-11.4	44.8-47.1	158-167
1.6 CRDI 134 AWD	134	112	11.6	42.8-43.5	169-173
2.0 CRDI 182 48V AWD	182	125	9.2	39.8-40.4	183-186

Sorento 5dr SUV £30,225–£42,925 ★★★★☆
Kia moves upmarket with a smart, well-priced and nicely appointed seven-seater. **LxWxH** 4780x1890x1685 **Kerb weight** 1932kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.2 CRDi	197	127	9.0-9.6	37.7-41.5	177-196

KTM

X-Bow 0dr open £57,345–£70,717 ★★★★☆
Eccentric looks and sharp handling but expensive. **LxWxH** 3738x1915x1202 **Kerb weight** 847kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 R	290	143	3.9	TBC	TBC
2.0 GT	280	143	4.1	TBC	TBC

LAMBORGHINI

Huracán 2dr coupé £162,900–£238,000 ★★★★☆
Junior Lambo mixes usability and drama skilfully. Performante is the most rounded. **LxWxH** 4459x1924x1165 **Kerb weight** 1389kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
5.2 V10	572	198	3.4	21.4	332
5.2 V10 Evo	631	201	2.9	20.3	332
5.2 V10 Performante	631	201	2.9	19.7	357

Aventador 2dr coupé £278,000–£360,000 ★★★★☆
Big, hairy V12 has astonishing visuals and performance. Handling could be sweeter. **LxWxH** 4797x2030x1136 **Kerb weight** 1575kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.5 V12 S	730	217	2.9	15.4	499
6.5 V12 SVJ	759	217	2.8	15.8	486

Urus 2dr coupé £159,925 ★★★★☆
Lambo's second SUV is more alluring and aims to use the V8's power better. **LxWxH** 5112x2016x1638 **Kerb weight** 2200kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
4.0 V8	631	189	3.6	22.2	325

LAND ROVER

Range Rover Evoque 5dr SUV £31,295–£49,565 ★★★★☆
Refined, luxurious baby Range Rover has matured for its second generation. **LxWxH** 4371x1996x1649 **Kerb weight** 1891kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 eD4	145	113	10.6	TBC	TBC
2.0 P200	198	134	8.0	29.1-31.3	TBC
2.0 P250	248	143	7.0	29.1-31.2	TBC
2.0 P300	298	150	6.3	28.9-30.9	TBC
2.0 D150	148	125	10.5	42.1-44.9	TBC
2.0 D150 AWD	148	122	11.2	39.9-40.0	TBC
2.0 D180	178	127	9.3	38.2-41.5	TBC
2.0 D240	238	140	7.2	37.8-40.9	TBC

Range Rover Velar 5dr SUV £45,260–£86,685 ★★★★☆
Dubbed the most car-like Landie ever and it doesn't disappoint. Expensive. **LxWxH** 4803x2032x1665 **Kerb weight** 1829kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 P250	248	135	7.1	27.7-30.8	TBC
2.0 P300	298	145	6.2	26.9-29.8	TBC
5.0 V8 P550 SVAD	548	170	4.5	23.0	TBC
2.0 D180	178	120	8.9	37.8-42.0	TBC
2.0 D240	238	135	7.4	36.5-41.1	TBC
3.0 V6 D275	272	135	7.0	34.7-38.0	TBC
3.0 V6 D300	298	150	6.7	34.7-38.0	TBC

Range Rover Sport 5dr SUV £68,155–£101,810 ★★★★½
Bigger and better; a cut-price Range Rover rather than a jumped-up Discovery. **LxWxH** 4850x2073x1780 **Kerb weight** 2111kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 P300	298	125	7.3	24.0-26.1	TBC
2.0 P400e PHEV	401	137	6.7	75.3-86.9	TBC
3.0 P400	398	140	6.2	24.9-27.4	TBC
5.0 V8 P525	522	155	5.3	18.9-20.2	TBC
5.0 V8 P575 SVR	572	176	4.5	18.9	TBC
3.0 SDV6	302	140	7.1	28.5-32.0	TBC
4.4 SDV8	336	140	7.2	25.5-27.0	TBC

Range Rover 5dr SUV £83,655–£115,875 ★★★★½
Wherever you are, the Rangie envelops you in a lavish, invincible sense of occasion. **LxWxH** 4999x2220x1835 **Kerb weight** 2249kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 SVD6	272	130	7.9	29.1-31.5	TBC
4.4 SDV8	336	135	7.3	25.4-26.6	TBC
3.0 P400	398	140	6.3	25.1-26.7	TBC
2.0 P400e	399	137	6.8	75.7-85.1	TBC
5.0 V8 P525	522	155	5.4	18.9-20.0	TBC
5.0 V8 P565 SVAD	562	155	5.4	18.9	TBC

Discovery Sport 5dr SUV £31,575–£42,475 ★★★★½
Seven seats, at home on-road and off-road, plus new-found desirability. **LxWxH** 4599x2069x1724 **Kerb weight** 1732kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 D150	148	121	10.5	42.0-47.8	TBC
2.0 D150 AWD	148	118	10.7	38.0-40.9	TBC
2.0 D180	178	126	9.1	37.3-40.4	TBC
2.0 D240	238	137	7.2	36.6-39.6	TBC
2.0 P200	198	129	8.5	28.5-30.8	TBC
2.0 P250	247	140	7.1	28.4-30.5	TBC

Discovery 5dr SUV £47,745–£57,360 ★★★★½
The country bumpkin given elocution lessons without losing its rugged capabilities. **LxWxH** 4970x2073x1888 **Kerb weight** 2115kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 SD4	234	121	8.0	TBC	TBC
3.0 V6 Td6	251	130	7.7	TBC	TBC
2.0 Si4	295	125	7.3	TBC	TBC

LEXUS

CT 5dr hatch £25,150–£31,250 ★★★★☆
Hybrid-only hatch has a pokey cabin and mismatched character traits. **LxWxH** 4350x1765x1445 **Kerb weight** 1465kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.8 VVT-i CT200h	134	112	10.3	53.2-54.3	TBC

ES 4dr saloon £35,150–£45,650 ★★★½☆
Gatecrashes the German-controlled saloon market in a way the GS could never manage. **LxWxH** 4975x1865x1445 **Kerb weight** 1680kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.5 VVT-i ES300h	218	112	8.9	48.7-53.2	TBC

IS 4dr saloon £31,895–£40,995 ★★★½☆
Sleek compact executive car is well-made and interesting but still a left-field choice. **LxWxH** 4680x1810x1430 **Kerb weight** 1620kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.5 VVT-i IS300h	220	125	8.3	44.1-50.0	TBC

LS 4dr saloon £73,270–£98,670 ★★★½☆
Luxury saloon gets more tech and opulence but is let down by its hybrid powertrain. **LxWxH** 5235x1900x1460 **Kerb weight** 2270kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.5 V6 VVT-i LS500h	348	155	5.4	35.7-36.2	TBC

RC 2dr coupé £39,145–£69,690 ★★★½☆
An also-ran, but the V8 RC F packs plenty of character and handles well enough. **LxWxH** 4695x1840x1395 **Kerb weight** 1736kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.5 VVT-I RC300h	220	118	8.6	40.9-45.5	TBC
5.0 V8 RC F	470	168	4.5	25.0	TBC

LC 2dr coupé £76,595–£91,995 ★★★★☆
Superb-looking coupé shows flickers of what made the LFA great. **LxWxH** 4770x1920x1345 **Kerb weight** 1935kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
5.0 V8 LC500	470	168	4.4	24.4	TBC
3.5 V6 LC500h	354	155	4.7	34.8	TBC

NX 5dr SUV £35,950–£45,500 ★★★☆☆
Some good ideas, but dramatically off the pace to drive. **LxWxH** 4630x1845x1645 **Kerb weight** 1905kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.5 VVT-I NX300h 4WD	194	112	9.2	35.7-37.1	TBC

RX 5dr SUV £49,700–£61,700 ★★★½☆
Low flexibility, but hybrid option makes a degree of economic sense. **LxWxH** 4890x1895x1690 **Kerb weight** 2100kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.5 V6 RX450h	308	124	7.7	35.3-37.1	120-127

UX 5dr SUV £29,905-£40,355 ★★★½☆
Refreshingly different premium SUV is a credible, if not class-leading, alternative. **LxWxH** 4495x1840x1520 **Kerb weight** 1620kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 250h	181	110	8.5	46.3-53.3	TBC

LOTUS

Elise 2dr open £41,655- £49,555 ★★★★☆
A delicate, vivid and unfettered drive; if you want a daily driver, shop elsewhere. **LxWxH** 3824x1719x1117 **Kerb weight** 830kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.8 VVT-i 220	217	145	4.2	36.7	TBC
1.8 VVT-i 246	242	151	3.8	36.2	TBC

Exige 2dr coupé £62,285-£103,285 ★★★★½
Sharp, uncompromising track car. Unforgiving on the road. **LxWxH** 4084x1802x1129 **Kerb weight** 1125kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.5 V6 VVT-i 350	345	162-170	3.8-3.9	28.2	TBC
3.5 V6 VVT-i 380	374	170-178	3.6-3.7	27.7	TBC
3.5 V6 VVT-i 430	428	180	3.2	27.7	TBC

Evora 2dr coupé £88,065 ★★★★☆
Dynamically it puts nearly everything else in the shade. Shame about the interior. **LxWxH** 4084x1802x1129 **Kerb weight** 1395kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.5 V6 VVT-i 410	404	174-190	4.1-4.2	25.7-26.7	TBC

MASERATI

Ghibli 4dr saloon £53,415–£57,325 ★★★☆☆
Maser's compact exec has the allure but lacks power and is poorly finished in places. **LxWxH** 4971x1945x1461 **Kerb weight** 1810kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0d V6	271	155	6.3	33.2-35.7	TBC
3.0 V6	345	166	5.5	23.5-24.9	TBC

GranTurismo 2dr coupé £92,230-£107,865 ★★★☆☆
Not short on richness or desirability and well capable of stirring the soul. **LxWxH** 5652x1948x1481 **Kerb weight** 1873kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
4.7 V8	453	185	4.8	TBC	TBC

GranCabrio 2dr open £106,285–£114,330 ★★★☆☆
Fantastic looks and soundtrack but an average chassis overall. **LxWxH** 4971x1945x1461 **Kerb weight** 1973kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
4.7 V8	453	177-179	4.9-5.0	TBC	TBC

Quattroporte 4dr saloon £76,050–£86,675 ★★★☆☆
Now a full-sized executive limo, with some added flair. Off the pace in several key areas. **LxWxH** 5264x1948x1481 **Kerb weight** 1860kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0d V6	271	155	6.4	33.2-35.7	TBC
3.0 V6	339	167	5.1	23.5-24.9	TBC

Levante 4dr SUV £58,315–£72,525 ★★★☆☆
Italian flair and good looks in abundance, but diesel not as sonorous as petrols. **LxWxH** 5003x1968x1679 **Kerb weight** 2109kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0d V6	271	143	6.9	29.1-30.0	189
3.0 V6	339	156	6.0	20.7-22.4	249
3.0 V6 S	424	164	5.2	20.9-22.4	253

MAZDA

2 5dr hatch £13,595–£17,395 ★★★★☆
Grown-up, well-made and drives with charm and vigour; engines aren't brilliant. **LxWxH** 4060x1695x1495 **Kerb weight** 1075kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 Skyactiv-G 75	74	106	12.1	49.6	TBC
1.5 Skyactiv-G 90	88	110-114	9.4-12.0	49.6	TBC
1.5 Skyactiv-G 115	113	124	8.7	48.7	TBC

3 5dr hatch £20,595–£24,995 ★★★★☆
Pleasing dynamism teamed with good practicality and punchy diesel engines. **LxWxH** 4060x1695x1495 **Kerb weight** 1351kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 Skyactiv-G 120	118	121	8.9	43.5	TBC
2.0 Skyactiv-G 165	162	130	8.2	37.7	TBC
1.5 Skyactiv-D 105	103	115	11.0	65.7	TBC
2.2 Skyactiv-D 150	148	130	8.1	47.1	TBC

3 Fastback 4dr saloon £20,595–£21,495 ★★★★☆
Refined and dynamically satisfying in a saloon bodystyle. **LxWxH** 4060x1695x1495 **Kerb weight** 1345kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 Skyactiv-G 120	118	123	8.8	43.5	TBC

6 4dr saloon £23,195–£32,685 ★★★½☆
A compelling mix of size, economy and performance. Interior is a let-down. **LxWxH** 4870x1840x1450 **Kerb weight** 1465kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 Skyactiv-G 145	143	129	9.5	40.3-42.2	TBC
2.0 Skyactiv-G 165	162	135	9.1	42.2	TBC
2.5 Skyactiv-G 194	191	138	8.1	38.2	TBC
2.2 Skyactiv-D 150	148	130	9.1	55.4	TBC
2.2 Skyactiv-D 184	181	140	7.9	47.9-53.5	TBC

6 Tourer 5dr estate £24,095–£33,585 ★★★½☆
Attractively styled but only average to drive. **LxWxH** 4805x1840x1480 **Kerb weight** 1465kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 Skyactiv-G 145	143	129	9.5	41.5	TBC
2.0 Skyactiv-G 165	162	135	9.1	41.5	TBC
2.5 Skyactiv-G 194	191	138	8.1	37.2	TBC
2.2 Skyactiv-D 150	148	130	9.1	47.1-53.3	TBC
2.2 Skyactiv-D 184	181	140	7.9	47.1-51.4	TBC

CX-3 5dr SUV £18,995–£24,995 ★★★★☆
Another supermini SUV with a sporting bent. Quite pricey but nicely appointed. **LxWxH** 4275x1765x1535 **Kerb weight** 1230kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 Skyactiv-G 121	118	119	9.0	42.8	TBC
2.0 Skyactiv-G 150	148	124	8.8	34.9-38.2	TBC
1.5 Skyactiv-D 115	103	114	9.9	54.3	TBC

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)

CX-5 5dr SUV £24,795–£34,395 ★★★★☆
Offers powerful diesel engines and strong performance, plus a welcoming interior. **LxWxH** 4550x1840x1675 **Kerb weight** 1575kg

2.0 Skyactiv-G 165	162	125	10.3	36.7-38.2	TBC
2.2 Skyactiv-D 150	148	112-127	9.4-10.3	43.5-49.6	TBC
2.2 Skyactiv-D 184	181	129	9.6	39.8-42.8	TBC

MX-5 2dr open £18,995–£25,795 ★★★★★
Brilliantly packaged, priced and perfectly poised but more vibrant than the original. **LxWxH** 3915x1735x1225 **Kerb weight** 1050kg

1.5 Skyactiv-G 132	129	127	8.3	44.1	TBC
2.0 Skyactiv-G 184	181	136	6.5	40.4	TBC

MX-5 RF 2dr open £22,595–£29,195 ★★★★★
Remains perfectly poised and vibrant, even with a folding metal roof. **LxWxH** 3915x1735x1230 **Kerb weight** 1090kg

1.5 Skyactiv-G 132	129	126	8.6	44.1	TBC
2.0 Skyactiv-G 184	181	124-126	7.9-8.7	37.7-40.4	TBC

McLAREN

540C 2dr coupé £126,055 ★★★★☆
The affordable end of McLaren's spectrum isn't any less enthralling to drive. **LxWxH** 4530x2095x1202 **Kerb weight** 1449kg

3.8 V8	533	199	3.5	23.2	276

570S 2dr coupé/open £145,305–£164,750 ★★★★★
Blisteringly fast and exciting supercar-slayer with hugely appealing handling. **LxWxH** 4530x2095x1202 **Kerb weight** 1440kg

3.8 V8	562	204	3.1	23.2	276

570GT 2dr coupé £154,000 ★★★★★
The 570GT retains the lusty, fast appeal of its sister car, even with added practicality. **LxWxH** 4530x2095x1201 **Kerb weight** 1498kg

3.8 V8	562	204	3.3	23.2	276

600LT 2dr coupé £185,500 ★★★★★
Lighter, faster and more athletic than the 570S. McLaren at its very best. **LxWxH** 4604x2095x1191 **Kerb weight** 1356kg

3.8 V8	592	204	2.9	23.2	277

720S 2dr coupé £218,020 ★★★★★
The start of an era for McLaren and what a way to begin it is. **LxWxH** 4543x2059x1196 **Kerb weight** 1419kg

4.0 V8	710	212	2.9	23.2	276

GT 2dr coupé £163,000 ★★★★½
Woking's most user-friendly car to date is still a McLaren first and foremost. **LxWxH** 4683x2095x1213 **Kerb weight** 1530kg

4.0 V8	612	203	3.2	23.7	270

Senna 2dr coupé £750,000 ★★★★★
Astounding circuit performance made superbly accessible. **LxWxH** 4744x2155x1229 **Kerb weight** 1309kg

4.0 V8	789	208	2.8	22.7	280

MERCEDES-BENZ

A-Class 5dr hatch £23,075–£35,580 ★★★★☆
A little bit of luxury in a desirable, hatchback-sized package. **LxWxH** 4419x1992x1440 **Kerb weight** 1445kg

1.3 A180	136	134	9.2	42.2-47.9	TBC
1.3 A200	163	140	8.2	40.9-47.9	TBC
2.0 A220	187	149	6.9	37.7-41.5	TBC
2.0 A220 4Matic	187	146	6.9	35.8-39.8	TBC
2.0 A250	224	155	6.2	37.7-41.5	TBC
2.0 AMG A35 4Matic	302	155	4.7	33.6-35.8	TBC
1.5 A180d	116	126	10.5	53.3-61.4	TBC
2.0 A200d	148	137	8.1	53.3-58.9	TBC
2.0 A220d	187	146	7.0	52.3-57.7	TBC

A-Class Saloon 4dr saloon £26,725–£36,485 ★★★½☆
Larger, more grown-up A-Class adds premium touch to smallest Merc saloon. **LxWxH** 4549x1796x1446 **Kerb weight** 1465kg

1.3 A180	133	134	8.9	42.8-48.7	TBC
1.3 A200	161	143	8.1-8.3	42.8-48.7	TBC
2.0 A220	188	150	7.0	38.2-42.2	TBC
2.0 A220 4Matic	188	147	7.0	36.2-40.9	TBC
2.0 A250	222	155	6.3	38.2-42.2	TBC
2.0 AMG A35	302	155	4.8	32.9-36.7	TBC
1.5 A180d	114	128	10.6	56.5-64.2	TBC

B-Class 5dr hatch £26,975–£32,375 ★★★½☆
A slightly odd prospect, but practical and classy nonetheless. **LxWxH** 4393x1786x1557 **Kerb weight** 1395kg

1.3 B180	136	132	9.0	40.4-47.1	TBC
1.3 B200	163	139	8.2	39.8-46.3	TBC
1.5 B180d	116	124	10.7	51.4-60.1	TBC
2.0 B200d	148	136	8.3	51.4-57.7	TBC
2.0 B220d	187	145	7.2	50.4-56.5	TBC

C-Class 4dr saloon £30,845–£75,733 ★★★★☆
Merc ramps up the richness, but the engines and dynamics aren't refined enough. **LxWxH** 4686x1810x1442 **Kerb weight** 1450kg

1.6 C180	156	140	8.2-8.3	37.7-43.5	TBC
1.5 C200	181	149	7.7	37.7-43.5	TBC
1.5 C200 4Matic	181	145	8.1	35.3-39.8	TBC
2.0 C300	258	155	5.9	35.3-39.8	TBC
3.0 V6 AMG C43 4Matic	385	155	4.7	28.0-29.4	TBC
4.0 V8 AMG C63	469	155	4.1	25.5-25.9	TBC
4.0 V8 AMG C63 S	503	180	4.0	25.5-25.9	TBC
1.6 C200d	158	140	7.9-8.5	48.7-61.4	TBC
2.0 C220d	192	149	6.9	45.6-53.3	TBC
2.0 C220d 4Matic	192	145	6.9	40.9-47.9	TBC
2.0 C300d	241	155	5.9	43.5-49.6	TBC
2.0 C300d 4Matic	241	155	5.8	42.2-47.9	TBC

C-Class Estate 5dr estate £32,045–£79,528 ★★★★☆
Decent practicality and fantastic interior. It's a shame that it's only ordinary to drive. **LxWxH** 4702x1810x1457 **Kerb weight** 1495kg

1.6 C180	156	138-139	8.4-8.5	34.0-42.2	TBC
1.5 C200	181	146	7.9	36.7-40.9	TBC
1.5 C200 4Matic	181	143	8.4	34.5-38.7	TBC
2.0 C300	258	155	6.0	34.5-38.7	TBC
3.0 V6 AMG C43 4Matic	385	155	4.8	27.4-28.8	TBC
4.0 V8 AMG C63	469	155	4.2	25.0-25.5	TBC
4.0 V8 AMG C63 S	503	174	4.1	24.8-25.5	TBC
1.6 C200d	158	137	8.2-8.7	47.1-57.7	TBC
2.0 C220d	192	145	7.0	44.8-51.4	TBC
2.0 C220d 4Matic	192	142	7.4	41.5-46.3	TBC
2.0 C300d	241	155	6.0	42.8-47.9	TBC
2.0 C300d 4Matic	241	155	6.0	41.5-47.1	TBC

C-Class Coupé 2dr coupé £35,285–£78,023 ★★★★☆
Nice balance of style, usability and driver reward. **LxWxH** 4696x1810x1405 **Kerb weight** 1505kg

1.6 C180	156	140	8.5	35.3-42.8	TBC
1.5 C200	181	149	7.9	37.7-42.2	TBC
1.5 C200 4Matic	181	145	8.4	35.3-39.8	TBC
2.0 C300	258	155	6.0	35.8-39.8	TBC
3.0 V6 AMG C43 4Matic	385	155	4.7	28.0-29.4	TBC
4.0 V8 AMG C63	469	155	4.0	25.0-25.5	TBC
4.0 V8 AMG C63 S	503	180	3.9	25.0-25.5	TBC
2.0 C220d	192	149	7.0	46.3-52.3	TBC
2.0 C220d 4Matic	192	145	7.3	42.8-47.9	TBC
2.0 C300d	241	155	6.0	44.1-49.6	TBC
2.0 C300d 4Matic	241	155	6.0	42.8-48.7	TBC

C-Class Cabriolet 2dr open £39,104–£83,036 ★★★★☆
Take all the good bits about the coupé and add the ability to take the roof off. Bingo. **LxWxH** 4686x1810x1409 **Kerb weight** 1645kg

1.6 C180	156	137-138	8.9	33.6-41.5	TBC
1.5 C200	181	146	8.5	36.2-40.4	TBC
1.5 C200 4Matic	181	143	8.8	33.2-38.2	TBC
2.0 C300	258	155	6.2	34.0-37.7	TBC
3.0 V6 AMG C43 4Matic	385	155	4.8	27.4-28.5	TBC
4.0 V8 AMG C63	469	155	4.2	24.6-24.8	TBC
4.0 V8 AMG C63 S	503	174	4.1	24.4-24.8	TBC
2.0 C220d	191	145	7.5	44.8-49.6	TBC
2.0 C220d 4Matic	191	142	7.8	40.9-46.3	TBC
2.0 C300d	242	155	6.3	42.2-47.1	TBC

E-Class 4dr saloon £38,065–£94,725 ★★★★☆
A wee bit pricey, and less sporting than its rivals, but still comfy and luxurious. **LxWxH** 4940x1852x1452 **Kerb weight** 1680kg

2.0 E220d	189	149	7.3	43.5-51.4	TBC
2.0 E220d 4Matic	189	149	7.5	42.8-47.9	TBC
2.0 E300e	329	155	5.5	134.5-156.9	TBC
2.0 E300de	312	155	5.7	176.6-201.8	TBC
3.0 E400d 4Matic	335	155	4.9	37.7-42.8	TBC
3.0 AMG E53 4Matic+	429	155	4.5	29.7-31.4	TBC
4.0 V8 AMG E63 S 4Matic+	594	155	3.4	22.8-23.7	TBC

E-Class Estate 5dr estate £40,065–£96,725 ★★★★☆
Far more practical than its rivals, but pricier and less sporty than those closest to it. **LxWxH** 4933x1852x1475 **Kerb weight** 1780kg

2.0 E220d	189	146	7.7	41.5-47.1	TBC
2.0 E220d 4Matic	189	145	7.8	40.9-44.8	TBC
2.0 E300de	312	155	5.8	166.2-176.6	TBC
3.0 V6 E400d 4Matic	335	155	5.1	37.2-40.9	TBC
2.0 E200	181	144	8.1	31.0-35.3	TBC
3.0 V6 AMG E53 4Matic+	429	155	4.5	29.4-30.7	TBC
4.0 V8 AMG E63 S 4Matic+	594	155	3.5	22.6-23.3	TBC

E-Class Coupé 2dr coupé £41,370–£64,740 ★★★★☆
Big, laid-back four-seat tourer. Borrows looks from the ravishing S-Class Coupé. **LxWxH** 4846x1860x1431 **Kerb weight** 1685kg

2.0 E300	237	155	6.4	31.0	TBC
2.0 E350	295	155	5.9	TBC	TBC
3.0 E450 4Matic	362	155	5.6	29.1-31.4	TBC
3.0 AMG E53 4Matic+	429	155	4.4	30.1-31.4	TBC
2.0 E220d	189	150	7.4	43.5-50.4	TBC
2.0 E220d 4Matic	189	149	7.6	42.2-47.1	TBC
3.0 E400d 4Matic	335	155	5.1	38.2-42.2	TBC

E-Class Cabriolet 2dr open £45,865–£69,235 ★★★★☆
Refined and sophisticated four-seater in the same mould as the S-Class Cabriolet. **LxWxH** 4846x1860x1429 **Kerb weight** 1780kg

2.0 E300	237	155	6.6	30.0	TBC
2.0 E350	295	155	6.1	TBC	TBC
3.0 E450 4Matic	362	155	5.8	28.8-30.7	TBC
3.0 AMG E53 4Matic	429	155	4.5	29.7-30.7	TBC
2.0 E220d	192	147	7.7	42.8-48.7	TBC
2.0 E220d 4Matic	192	145	7.9	41.5-45.6	TBC
3.0 E400d 4Matic	335	155	5.2	37.7-40.9	TBC

S-Class 4dr saloon £75,285–£189,260 ★★★★★
Mercedes has given the S-Class a refresh and an added boost of tech. **LxWxH** 5141x1905x1498 **Kerb weight** 1970kg

3.0 V6 S450 L	389	155	5.1	33.2-26.2	TBC
3.0 V6 S500 L	457	155	4.8	33.2-36.2	TBC
3.0 V6 S560e L	472	155	5.0	104.6-128.4	TBC
4.0 V8 AMG S63	594	155	4.3	23.2-24.4	TBC
6.0 V12 AMG S65	611	155	4.2	18.6	TBC
6.0 V12 S650 Maybach	611	155	4.7	19.5-20.0	TBC
2.9 S350d	282	155	6.0	38.7-44.1	TBC
2.9 S400d	335	155	5.4	38.7-44.1	TBC

S-Class Coupé 2dr coupé £105,875–£190,855 ★★★★☆
More tech and cleaner engines make the opulent luxury tourer more appealing. **LxWxH** 5027x1912x1414 **Kerb weight** 2065kg

4.0 V8 S560	455	155	4.6	26.4-27.7	TBC
4.0 V8 AMG S63	594	155	4.2	24.1-24.6	TBC
6.0 V12 AMG S65	611	155	4.1	18.6	TBC

S-Class Cabriolet 2dr open £117,670–£198,780 ★★★★☆
As above but with the added allure of a retractable fabric roof. **LxWxH** 5027x1912x1420 **Kerb weight** 2150kg

4.0 V8 S560	455	155	4.6	26.4-27.2	TBC
4.0 V8 AMG S63	594	155	4.2	23.7-23.9	TBC
6.0 V12 AMG S65	611	155	4.1	18.6	TBC

CLA Coupé 4dr saloon £30,550–£43,235 ★★★★☆
May use A-Class underpinnings, but engineered to be much sportier to drive. **LxWxH** 4688x1830x1439 **Kerb weight** 1490kg

1.3 CLA180	133	134	9.0	42.8-47.9	TBC
1.3 CLA200	161	142	8.2	42.8-47.9	TBC
2.0 CLA220	188	150	7.0	38.7-42.2	TBC
2.0 CLA220 4Matic	188	147	7.0	36.7-40.4	TBC
2.0 CLA250	222	155	6.3	38.7-42.2	TBC
2.0 AMG CLA35	302	155	4.9	34.9-37.2	TBC
1.5 CLA220d	188	152	7.1	53.3-57.7	TBC

CLA Shooting Brake 5dr estate £28,245–£47,635 ★★★½☆
The most practical of the A-Class range, but it suffers for its challenging styling. **LxWxH** 4640x1777x1435 **Kerb weight** 1430kg

1.6 CLA180	119	130	8.8-9.1	35.8-40.9	TBC
1.6 CLA200	154	140	8.5	35.3-40.9	TBC

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 CLA220 4Matic	181	146	7.2	33.6-36.2	TBC
2.0 CLA45 AMG 4Matic	370	155	4.3	29.1-30.1	TBC
2.1 CLA220d	171	142	7.8	43.5-48.7	TBC
2.1 CLA220d 4Matic	171	140	7.8	41.5-45.6	TBC

CLS Coupé 4dr saloon £53,100–£84,120 ★★★★☆
Retains the sleek coupé style and has more tech – without losing its allure. **LxWxH** 4996x1896x1436 **Kerb weight** 1935kg

2.0 CLS350	313	155	6.0	32.1-34.9	TBC
3.0 CLS450 4Matic	356	155	4.8	31.4-34.0	TBC
3.0 V6 AMG CLS 53 4Matic+	429	155	4.5	30.1-31.0	TBC
3.0 CLS350d 4Matic	277	155	5.7	37.7-41.5	TBC
3.0 CLS400d 4Matic	330	155	5.0	37.7-41.5	TBC

SLC 2dr open £32,749–£48,400 ★★★½☆
Another small convertible exhibiting all the charm that a Mercedes should. **LxWxH** 4143x1810x1301 **Kerb weight** 1435kg

1.6 SLC180	152	139-140	7.9-8.1	37.2-42.8	TBC
2.0 SLC200	178	147-149	6.9-7.0	37.2-40.4	TBC
2.0 SLC300	237	155	5.8	35.3-37.2	TBC
3.0 V6 AMG SLC43	356	155	4.7	31.7-32.5	TBC

SL 2dr open £78,345–£119,045 ★★★★½
Big, luxurious drop-top is classier than a royal stud farm. Few feel more special. **LxWxH** 4631x1877x1315 **Kerb weight** 1735kg

3.0 V6 SL400	356	155	4.9	TBC	TBC
4.7 V8 SL500	442	155	4.3	25.9-26.9	TBC
5.5 V8 AMG SL63	568	155-186	4.1	23.2-23.5	TBC

AMG GT 2dr coupé/open £110,645–£178,765 ★★★★☆
Million-dollar looks and a railgun V8, but extremely firm chassis affects its usability. **LxWxH** 4544x1939x1287 **Kerb weight** 1615kg

4.0 V8 GT	462	188-189	4.0	23.0-23.5	TBC
4.0 V8 GT S	507	193	3.8	23.0-23.3	TBC
4.0 V8 GT C	541	196-197	3.7	21.9-22.1	TBC
4.0 V8 GT R	568	198	3.6	22.1	TBC

AMG GT 4-Door Coupé 4dr saloon £121,350–£135,350 ★★★★½
New four-door, four-wheel-drive GT may be a confusing car to contemplate, but it's a deeply impressive one to drive. **LxWxH** 5054x1953x1447 **Kerb weight** 2100kg

4.0 V8 GT63 4Matic+	585	193	3.4	21.4-22.6	TBC
4.0 V8 GT63 S 4Matic+	639	196	3.2	21.4-22.1	TBC

EQC 5dr SUV £65,640 ★★★★½
Brisk, tidy-handling electric SUV has everything needed to do well on UK roads. **LxWxH** 4762x1884x1624 **Kerb weight** 2495kg

400 4Matic	402	112	5.1	TBC	0

GLA 5dr SUV £25,105–£47,960 ★★★½☆
Not the most practical crossover but good looking and very decent to drive. **LxWxH** 4417x1804x1494 **Kerb weight** 1395kg

1.6 GLA180	120	124	8.7-9.0	35.3-40.4	TBC
1.6 GLA200	152	134	8.1-8.4	34.9-39.8	TBC
2.0 GLA250 4Matic	204	143	6.6	32.5-35.8	TBC
2.0 GLA45 AMG 4Matic	370	155	4.4	29.4-30.1	TBC
2.1 GLA200d	132	127	9.1-9.5	42.2-46.3	TBC
2.1 GLA200d 4Matic	132	124	9.1	41.5-45.6	TBC
2.1 GLA220d 4Matic	171	135	7.7	40.4-44.8	TBC

GLC 5dr SUV £37,340–£91,594 ★★★★☆
Not exactly exciting to drive, but does luxury and refinement better than most. **LxWxH** 4656x1890x1639 **Kerb weight** 1735kg

2.0 GLC 250 4Matic	208	138	7.3	28.5-31.7	TBC
3.0 V6 AMG GLC43 4Matic	356	155	4.9	24.8-26.7	TBC
4.0 V8 AMG GLC63 4Matic	462	155	4.0	22.1-23.2	TBC
4.0 V8 AMG GLC63 S 4Matic	495	155	3.8	22.1-22.8	TBC
2.1 GLC 220d 4Matic	168	130	8.3	36.7-41.5	TBC
2.1 GLC 250d 4Matic	198	138	7.6	36.7-42.2	TBC
3.0 GLC 350d 4Matic	255	148	6.2	32.8-36.7	TBC

GLC Coupé 5dr SUV £42,365–£93,989 ★★★★☆
A coupé-shaped SUV destined to be outrun by the X4 – unless you're in an AMG. **LxWxH** 4732x1890x1602 **Kerb weight** 1785kg

2.0 GLC 250 4Matic	211	138	7.3	29.1-31.7	TBC
3.0 V6 AMG GLC43 4Matic	356	155	4.9	25.0-26.9	TBC
4.0 V8 AMG GLC63 4Matic	462	155	4.0	22.4-23.5	TBC
4.0 V8 AMG GLC63 S 4Matic	495	155	3.8	22.4-23.2	TBC
2.1 GLC 220d 4Matic	168	130	8.3	37.7-40.9	TBC
2.1 GLC 250d 4Matic	198	138	7.6	37.7-41.5	TBC
3.0 GLC 350d 4Matic	255	148	6.2	33.6-36.7	TBC

GLE 5dr SUV £55,685–£62,300 ★★★★☆
The ML replacement isn't inspiring to drive but does come with a classy interior. **LxWxH** 4819x2141x1796 **Kerb weight** 2165kg

3.0 V6 GLE 400 4Matic	364	155	5.7	26.2-32.5	TBC
3.0 V6 GLE300d 4Matic	243	149	7.2	33.6-39.2	TBC
3.0 V6 GLE350d 4Matic	272	143	6.9	29.1-36.2	TBC
3.0 V6 GLE400d 4Matic	328	149	5.8	29.4-35.3	TBC

GLE Coupé 5dr SUV £65,030–£102,010 ★★★★☆
Not the prettiest SUV you will ever see, but a decent option against the BMW X6. **LxWxH** 4900x2129x1731 **Kerb weight** 2240kg

3.0 V6 GLE 350d 4Matic	251	140	7.0	TBC	TBC
3.0 V6 AMG GLE43 4Matic	379	155	5.7	23.2-24.1	TBC
5.5 V8 AMG GLE63 S 4Matic	568	155	4.2	18.2-18.7	TBC

G-Class 5dr SUV £94,000–£143,305 ★★★½☆
Massively expensive and compromised, but with character in abundance. **LxWxH** 4764x1867x1954 **Kerb weight** 2550kg

3.0 G350d 4Matic	282	124	7.4	25.2-25.9	TBC
4.0 V8 AMG G63 4Matic	577	137	4.5	18.6-18.8	TBC

GLS 5dr SUV £73,940–£106,870 ★★★½☆
The replacement for the massive GL can still seat seven in comfort. **LxWxH** 5162x1982x1850 **Kerb weight** 2475kg

3.0 V6 GLS 350d 4Matic	251	138	7.8	27.4-29.4	TBC
5.5 V8 AMG GLS63 4Matic	568	155-168	4.6	17.7-18.2	TBC

X-Class 5dr pick-up £35,238–£47,412 ★★★★☆
Lifts the bar on commercial vehicle comfort while retaining tough qualities. **LxWxH** 5340x2113x1819 **Kerb weight** 2234kg

2.3 X220 d	163	105	12.9	TBC	TBC
2.3 X250 d	190	109	11.8	TBC	TBC
3.0 V6 X350 d	285	127	7.9	TBC	TBC

MG

3 5dr hatch £9495–£12,995 ★★★½☆
Neatly tuned and nice sporty styling. Breaks the mould for sub-£9000 superminis. **LxWxH** 4018x1729x1507 **Kerb weight** 1125kg

1.5 VTI-Tech	104	108	10.4	TBC	TBC

ZS 5dr SUV £12,495–£26,995 ★★★☆☆
Much improved on previous MGs, but still lacks the sophistication of its closest rivals. **LxWxH** 4314x1809x1611 **Kerb weight** 1190kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 VTI-Tech	104	109	10.9	TBC	TBC
1.0T GDi	109	112	12.4	TBC	TBC
44.5kWh EV	141	87	8.5	TBC	0

MINI

3dr Hatch 3dr hatch £16,190–£29,990 ★★★★½
Three-pot engines and cleverly designed interior make the Mini a superb choice. **LxWxH** 3821x1727x1414 **Kerb weight** 1190kg

1.5 One	101	121	10.1-10.2	43.5-47.9	TBC
1.5 Cooper	134	130	7.8-7.9	43.5-47.9	TBC
2.0 Cooper S	189	145-146	6.7-6.8	38.7-43.5	TBC
2.0 John Cooper Works	227	152	6.1-6.3	38.7-40.4	TBC

5dr Hatch 5dr hatch £16,890–£25,030 ★★★★½
Mini charm in a more usable package, but still not as practical as rivals. **LxWxH** 3982x1727x1425 **Kerb weight** 1240kg

1.5 One	101	119	10.1-10.5	42.8-47.1	TBC
1.5 Cooper	134	129	8.1-8.2	42.2-47.1	TBC
2.0 Cooper S	189	143-144	6.8-6.9	38.2-42.8	TBC

Convertible 2dr open £20,080–£30,625 ★★★½☆
A fun open-top car but compromised on practicality and dynamics. **LxWxH** 3821x1727x1415 **Kerb weight** 1280kg

1.5 Cooper	134	128-129	8.7-8.8	41.5-45.6	TBC
2.0 Cooper S	189	142-143	7.1-7.2	38.7-40.9	TBC
2.0 John Cooper Works	167	149	6.5-6.6	37.2-38.7	TBC

Clubman 5dr hatch £19,995–£27,685 ★★★★☆
Cheery and alternative Mini 'six-door' takes the brand into new territory. **LxWxH** 4253x1800x1441 **Kerb weight** 1375kg

1.5 One	102	115	11.3	39.2-43.5	TBC
1.5 One D	114	119	10.8	56.5-58.9	TBC
1.5 Cooper	134	127	9.1	39.2-43.5	TBC
1.5 Cooper D	148	132	8.5-8.6	50.4-56.5	TBC
2.0 Cooper S	189	142	7.1-7.2	36.7-39.8	TBC

Countryman 5dr hatch £23,385–£33,995 ★★★½☆
Bigger than before, but still more funky than useful. Still not all that pretty, either. **LxWxH** 4299x2005x1557 **Kerb weight** 1440kg

1.5 Cooper	136	124	9.7	37.2-40.9	TBC
1.5 Cooper All4	136	122	10.3	35.3-40.4	TBC
2.0 Cooper S	192	140	7.5-7.6	35.8-38.2	TBC
2.0 Cooper S All4	192	138	7.6	34.4-36.2	TBC
2.0 Cooper D	150	129	9.1	47.9-54.3	TBC
2.0 Cooper D All4	150	127	9.0	46.3-49.6	TBC
1.5 plug-in hybrid	220	123	6.8	88.3-97.4	TBC

MITSUBISHI

Mirage 5dr hatch £11,295–£14,020 ★★★☆☆
A straightforward hatchback – but not for the likes of us. **LxWxH** 3795x1665x1505 **Kerb weight** 845kg

1.1 Mi-VEC	79	107	11.7-12.8	47.9-55.4	TBC

ASX 5dr SUV £19,570–£29,485 ★★★☆☆
Decent engines, but otherwise an unexceptional crossover. **LxWxH** 4355x1770x1640 **Kerb weight** 1260kg

1.6 Mi-VEC	115	114	11.5	37.7	TBC
1.6 DI-D 2WD	112	113	11.2	TBC	TBC
1.6 DI-D 4WD	112	111	11.5	TBC	TBC
2.2 DI-D 4WD	148	118	10.8	TBC	TBC

Eclipse Cross 5dr SUV £21,915–£31,015 ★★★☆☆
Stylish, future-looking mid-sized SUV shows where Mitsubishi's destiny lies. **LxWxH** 4695x1810x1710 **Kerb weight** 1425kg

1.5 Mi-VEC 2WD	160	124-127	9.3-10.3	33.2-37.7	TBC
1.5 Mi-VEC 4WD	160	124	9.8	32.5	TBC

Outlander 5dr SUV £28,220–£46,060 ★★★½☆
Creditable effort, but still cheap in places: PHEV a boon for fleet users. **LxWxH** 4695x1810x1710 **Kerb weight** 1565kg

2.0 Mi-VEC 4WD	148	118	13.3	32.5	TBC
2.2 DI-D 4WD	148	118-124	10.2-11.6	TBC	TBC
2.0 Mi-VEC PHEV	200	106	11.0	139.7	TBC

Shogun Sport 5dr SUV £37,775–£39,775 ★★★☆☆
Has a fitness for purpose that could appeal to those who tow or haul big loads. **LxWxH** 4785x1815x1805 **Kerb weight** 2100kg

2.5 DOHC 4WD	179	112	11.0	TBC	TBC

MORGAN

3 Wheeler 0dr open £39,486 ★★★★★
The eccentric, characterful and brilliant Morgan is a testament to English creativity. **LxWxH** 3225x1720x1000 **Kerb weight** 525kg

2.0 V-twin 68	68	115	7.0	TBC	TBC
2.0 V-twin 82	82	115	6.0	TBC	TBC

4/4 2dr open £40,206 ★★☆☆☆
Has its appeal but not as rewarding to drive as it could be. **LxWxH** 4010x1630x1220 **Kerb weight** 795kg

1.6 i4 Sigma	110	115	8.0	TBC	TBC

Plus 4 2dr open £44,106 ★★½☆☆
Needs more chassis finesse, but the Plus 4 still charms nonetheless. **LxWxH** 4010x1720x1220 **Kerb weight** 927kg

2.0 GDi	154	118	7.5	TBC	TBC

Roadster 2dr open £55,074 ★★☆☆☆
More advanced, but pricey and needs better brakes. **LxWxH** 4010x1720x1220 **Kerb weight** 950kg

3.7 V6 Cyclone	280	140	5.5	TBC	TBC

Plus Six 2dr open £77,995 ★★★½☆
Feels like progress in lots of ways, but not yet the driver's car it might be. **LxWxH** 3890x1756x1220 **Kerb weight** 1075kg

3.0	335	166	4.2	38.2	180

NISSAN

Micra 5dr hatch £12,875–£20,005 ★★★★☆
Refreshed look and better handling makes it an enticing choice. Has its flaws, though. **LxWxH** 3991x1743x1455 **Kerb weight** 1490kg

1.0 71PS	70	98	16.4	46.3	TBC
0.9 IG-T 90	88	109	12.1	47.1	TBC
1.0 IG-T 100	98	114	10.9	50.4	TBC
1.0 DIG-T 117	115	121	9.9	47.9	TBC
1.5 dCi 90	88	111	11.9	TBC	TBC

Leaf 5dr hatch £26,190–£29,390 ★★★★☆
Better looks, better value and better range from this second-gen electric hatch. **LxWxH** 4387x1768x1520 **Kerb weight** 1245kg

40kWh	147	89.5	7.9	TBC	0

Juke 5dr hatch £15,505–£21,805 ★★★½☆
High-riding, funky hatch is a compelling package. High CO_2 figures, though. **LxWxH** 4135x1765x1565 **Kerb weight** 1605kg

1.6 112	110	111	12.5	34.0-35.8	TBC

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 dCi 110	108	109	11.2	49.6	TBC

Qashqai 5dr SUV £19,995–£31,145 ★★★★½
The defining modern crossover. The Mk2 is better in all areas, hence its popularity. **LxWxH** 4394x1806x1590 **Kerb weight** 1331kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.3 DIG-T 140	138	120	10.5	40.1-41.4	TBC
1.3 DIG-T 160	158	123-124	8.9-9.9	40.0-41.4	TBC
1.5 dCi 115	113	112	12.3	51.9-53.7	TBC
1.7 DCI 150	148	119	9.5	46.4-50.2	TBC

X-Trail 5dr SUV £29,930–£37,525 ★★★½☆
There aren't many cheaper ways of owning an SUV. Has a better range of engines, too. **LxWxH** 4640x1820x1710 **Kerb weight** 1505kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 dCi 130	128	111-116	10.5-11.4	TBC	TBC
1.6 dCi 130 4WD	128	115	11.0	TBC	TBC
1.6 DIG-T 163	160	124	9.7	TBC	TBC
2.0 dCi 177	174	123	9.6	TBC	TBC
2.0 dCi 177 4WD	174	121-126	9.4-10.0	TBC	TBC

370Z 2dr coupé £29,805–£40,305 ★★★½☆
Old-school and profoundly mechanical coupé. The Healey 3000 of today – but meaner. **LxWxH** 4265x1845x1315 **Kerb weight** 1496kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.7 V6	323	155	5.3	23.3-23.6	TBC
3.7 V6 Nismo	339	155	5.2	23.2	TBC

GT-R 2dr coupé £81,995–£151,995 ★★★★☆
Monstrously fast Nissan has been tweaked and sharpened. Still a blunt object, though. **LxWxH** 4710x1895x1370 **Kerb weight** 1725kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.8 V6	562	196	TBC	20.2	TBC
3.8 V6 Nismo	591	196	TBC	19.6	TBC

NOBLE

M600 2dr coupé £248,000–£287,600 ★★★½☆
Deliciously natural and involving; a bit ergonomically flawed. **LxWxH** TBC **Kerb weight** 1198kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
4.4 V8	662	225	TBC	TBC	TBC

PEUGEOT

iOn 5dr hatch £20,534 ★★½☆☆
Good electric powertrain; looks extremely old hat against better EV rivals. **LxWxH** 3474x1475x1608 **Kerb weight** 1120kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
47kW	62	81	15.9	TBC	0

108 3dr/5dr hatch £9690–£14,985 ★★★½☆
Sister car to the Aygo – and a distant second to most city car rivals. **LxWxH** 3475x1615x1460 **Kerb weight** 840kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 72	71	100	13.0	53.5-57.3	TBC
1.0 72 2-Tronic	71	100	15.2	51.6-55.0	TBC

208 3dr/5dr hatch £14,900–£18,735 ★★★½☆
A big improvement for Peugeot, if not for the supermini class. **LxWxH** 3475x1615x1460 **Kerb weight** 1065kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 82	79	109-111	12.2-14.5	46.6-51.5	TBC
1.2 PureTech 110	107	118	9.8-9.6	39.1-46.5	TBC
1.5 BlueHDi 100	102	117	10.7	55.6-67.7	TBC

308 5dr hatch £20,000–£29,920 ★★★★½
Classy all-round appeal makes it a serious contender, but rear space is a little tight. **LxWxH** 4253x1804x1457 **Kerb weight** 1190kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 110	107	117	11.1	40.4-47.7	TBC
1.2 PureTech 130	126	128-129	9.1-9.6	41.3-48.9	TBC
1.6 PureTech 225	224	146	7.4	36.9-40.1	TBC
1.6 PureTech 260	259	155	6.0	37.8	TBC
1.6 BlueHDi 100	99	112	12.2	54.9-63.8	TBC
1.5 BlueHDi 130	126	127	9.8	53.2-62.7	TBC
2.0 BlueHDi 180 EAT8	175	140	8.2	45.0-49.4	TBC

308 SW 5dr estate £20,950–£29,330 ★★★★☆
Estate bodystyle enjoys the classy appeal of the hatchback. **LxWxH** 4585x1563x1472 **Kerb weight** 1190kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 110	107	117	11.6	40.4-47.7	TBC
1.2 PureTech 130	126	127	9.5-10.0	41.3-48.9	TBC
1.6 PureTech 225	224	146	7.5	36.9-40.1	TBC
1.5 BlueHDI 100	99	111	12.3	54.9-63.8	TBC
1.5 BlueHDi 130	126	126	10.0	53.2-62.7	TBC
2.0 BlueHDi 180 EAT8	178	139	8.4	45.0-49.4	TBC

508 4dr saloon £25,039–£37,439 ★★★★☆
Stylish and likeable but lacking the polish of more premium rivals. **LxWxH** 4750x1859x1430 **Kerb weight** 1535kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 PureTech 180	178	143	7.9	38.0-41.8	TBC
1.6 PureTech 225	223	155	7.1	36.3-39.8	TBC
1.5 BlueHDi 130	129	129	9.4-9.7	51.4-59.8	TBC
2.0 BlueHDI 160	158	143	8.4	45.2-51.1	TBC
2.0 BlueHDi 180	174	146	8.0	45.0-50.6	TBC

508 SW 5dr estate £26,845–£40,944 ★★★☆☆
Bodystyle takes the edge off the 508's style yet doesn't fully address practicality. **LxWxH** 4778x1859x1420 **Kerb weight** 1430kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.6 PureTech 180	178	140	8.0	38.0-41.8	156
1.6 PureTech 225	223	153	7.4	36.3-39.8	167
1.5 BlueHDI 130	128	129	9.9-10.1	51.4-59.8	128-131
2.0 BlueHDi 160	159	140	8.5	45.2-51.1	149

2008 5dr SUV £17,730–£24,490 ★★★½☆
Efficient and well-mannered but facelift still leaves it short on space and style. **LxWxH** 4159x1829x1556 **Kerb weight** 1045kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 82	79	105	13.5	43.8-46.8	TBC
1.2 PureTech 110	107	117-119	9.9-10.3	39.1-44.8	TBC
1.2 PureTech 130	126	124	9.3	44.4-49.9	TBC
1.6 BlueHDi 100	96	112	11.3	TBC	TBC
1.6 BlueHDi 120	116	119	9.6	52.9-58.2	TBC

3008 5dr SUV £24,575–£36,845 ★★★★☆
Cleverly packaged Peugeot offers just enough SUV DNA to make the difference. **LxWxH** 4447x2098x1624 **Kerb weight** 1250kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 130	126	117	10.5-10.8	36.5-43.6	TBC
1.6 PureTech 180	178	136	8.0	35.2-39.6	TBC
1.5 BlueHDi 130	126	119	9.5	48.0-56.3	TBC
2.0 BlueHDi 180	175	131	8.9	42.3-47.1	TBC

5008 5dr SUV £26,725–£38,995 ★★★★☆
Less MPV, more SUV, and shares its siblings' good looks. Competent to drive, too. **LxWxH** 4641x1844x1640 **Kerb weight** 1511kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 PureTech 130	126	117	10.4-10.9	36.5-44.2	TBC
1.6 PureTech 180	178	135	8.3	35.2-39.6	TBC
1.5 BlueHDi 130	129	119	10.7	48.0-56.3	TBC
2.0 BlueHDi 180	175	131	9.1	42.3-47.1	TBC

PORSCHE

718 Boxster 2dr open £46,651–£73,405 ★★★★½
Our idea of drop-top heaven. Exceptional to drive, whether cruising or hurrying. **LxWxH** 4379x1801x1280 **Kerb weight** 1335kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0	290	170	4.9-5.1	31.4-33.2	TBC
2.0 T	296	170	4.7-5.3	31.4-32.8	TBC
2.5 S	339	177	4.4-4.6	29.1-30.7	TBC
2.5 GTS	355	180	4.3-4.6	28.5-30.4	TBC
4.0 Spyder	414	187	4.4	25.7	TBC

718 Cayman 2dr coupé £44,790–£75,348 ★★★★★
Scalpel-blade incisiveness, supreme balance and outstanding driver involvement. **LxWxH** 4379x1801x1295 **Kerb weight** 1335kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0	290	170	4.9-5.1	31.4-33.2	TBC
2.0 T	296	170	4.9-5.3	31.4-32.8	TBC
2.5 S	339	177	4.4-4.6	29.1-31.0	TBC
2.5 GTS	355	180	4.3-4.6	28.5-30.7	TBC
4.0 GT4	414	188	4.4	25.7	TBC

911 2dr coupé £82,793–£98,418 ★★★★½
Wider, eighth-generation 911 is still eminently fast, and capable at all speeds. **LxWxH** 4519x1852x1300 **Kerb weight** 1565kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 Carrera	380	182	4.0	26.6-28.5	TBC
3.0 Carrera 4	380	180	4.0	26.2-28.2	TBC
3.0 Carrera S	444	191	3.5	27.2-28.5	TBC
3.0 Carrera 4S	444	190	3.4	25.7-27.2	TBC

911 Cabriolet 2dr open £92,438–£108,063 ★★★★☆
Fewer compromises than ever, if rewarding only at full attack. **LxWxH** 4519x1852x1297 **Kerb weight** 1585kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 Carrera	380	180	4.2	26.2-28.0	TBC
3.0 Carrera 4	380	179	4.2	25.9-27.7	TBC
3.0 Carrera S	444	190	3.7	26.4-28.0	TBC
3.0 Carrera 4S	444	188	3.6	25.0-26.6	TBC

Panamera 4dr saloon £72,890–£149,537 ★★★★★
Revamped big saloon is an absolute belter, making it almost the perfect grand tourer. **LxWxH** 5049x1937x1423 **Kerb weight** 1815kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 V6 4	321	162	5.5-5.6	25.0-26.9	TBC
2.9 V6 4S	428	179	4.4-4.5	TBC	TBC
2.9 V6 E-Hybrid	449	172	4.6-4.7	78.5-85.6	TBC
4.0 V8 GTS	458	181	4.1	22.2-23.5	TBC
4.0 V8 Turbo	533	190	3.8-3.9	22.1-23.0	TBC
4.0 V8 Turbo S E-Hybrid	671	192	3.4-3.5	74.3-80.7	TBC

Panamera Sport Turismo 5dr estate £75,037–£142,279 ★★★★★
The Panamera in a more practical form, and now it's a good-looking beast. **LxWxH** 5049x1937x1428 **Kerb weight** 1880kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 V6 4	321	160	5.5	24.6-25.6	TBC
2.9 V6 4S	428	177	4.4	TBC	TBC
2.9 V6 E-Hybrid	449	170	4.6	76.3-80.7	TBC
4.0 V8 GTS	458	179	4.1	22.2-23.2	TBC
4.0 V8 Turbo	533	188	3.8	22.1-22.8	TBC
4.0 V8 Turbo S E-Hybrid	671	192	3.4	72.4-74.3	TBC

Taycan 4dr saloon £115,858–£138,826 ★★★★½
First all-electric Porsche shows the rest of the world how it should be done. **LxWxH** 4963x1966x1381 **Kerb weight** 2305g

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
Turbo	671	161	3.2	TBC	0
Turbo S	751	161	2.8	TBC	0

Macan 5dr SUV £46,913–£68,530 ★★★★½
Spookily good handling makes this a sports utility vehicle in the purest sense. **LxWxH** 4692x1923x1624 **Kerb weight** 1770kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0	243	139	6.7	25.7-28.2	TBC
3.0 V6 S	351	157	5.3	23.9-25.7	TBC
3.0 V6 Turbo	434	167	4.3	23.5-24.8	TBC

Cayenne 5dr SUV £57,195–£123,349 ★★★★½
Refreshed look, improved engines, interior and a better SUV overall. **LxWxH** 4918x1983x1696 **Kerb weight** 1985kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 V6	335	152	6.2	22.2-24.1	TBC
3.0 V6 E-hybrid	456	157	5.0	60.1-72.4	TBC
2.9 V6 S	428	164	5.2	TBC	TBC
4.0 V8 Turbo	533	177	4.1	20.2-20.8	TBC
4.0 V8 S E-Hybrid	671	183	3.8	52.3-58.9	TBC

Cayenne Coupé 5dr SUV £62,129–£125,946 ★★★★☆
Little different to drive than the standard car but certainly has an appeal all of its own. **LxWxH** 4931x1983x1676 **Kerb weight** 2030kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.0 V6	335	150	6.0	22.2-23.9	TBC
3.0 V6 E-Hybrid	456	157	5.1	60.1-70.6	TBC
2.9 V6 S	428	163	5.0	21.9-23.7	TBC
4.0 V8 Turbo	533	177	3.9	20.2-20.8	TBC
4.0 V8 S E-Hybrid	671	183	3.8	52.3-57.6	TBC

RADICAL

RXC GT 2dr open TBC ★★★½☆
Designed for pounding around a track; out of its element on the road. **LxWxH** 4300x1960x1127 **Kerb weight** 1125kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
3.5 V6 400	400	179	2.8	TBC	TBC
3.5 V6 650	650	180	2.7	TBC	TBC

RENAULT

Twizy 2dr hatch £6695–£7995 ★★★½☆
Zany solution to personal mobility is suitably irreverent and impractical. **LxWxH** 2338x1381x1454 **Kerb weight** 474kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
MB L7e	17	50	TBC	TBC	0

Zoe 5dr hatch £18,420–£27,820 ★★★½☆
A far more practical zero-emission solution. Attractive price, too. **LxWxH** 4084x1730x1562 **Kerb weight** 1470kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
5AGEN2	86	84	13.5	TBC	0
5AGEN3	89	84	13.5	TBC	0

Twingo 3dr hatch £10,750–£13,455 ★★★☆☆
Handsome, unusual rear-engined city car but not a class leader. **LxWxH** 3595x1646x1554 **Kerb weight** 865kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 SCe 70	67	94	14.5	47.9-48.7	TBC
0.9 TCe 90	87	103	10.8	45.6-47.9	TBC

Clio 5dr hatch £13,615–£19,165 ★★★★☆
An attractive,stylish and practical proposition, but cheap in places and feels dated. **LxWxH** 4062x1732x1448 **Kerb weight** 1059kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
0.9 TCe 75	75	110	12.3	46.3-47.1	TBC
0.9 TCe 90	87	112	12.2-13.1	47.1	TBC
1.5 dCi 90	87	109-112	12.0-12.9	56.5-57.6	TBC

Mégane 5dr hatch £17,715–£29,195 ★★★½☆
Stylish and refined but bland. Nothing exceptional. **LxWxH** 4359x1814x1447 **Kerb weight** 1340kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 TCe 140	138	127	10.6	42.8-45.6	TBC
1.5 Blue dCi 115	113	118	11.1	58.9-62.8	TBC
1.8 RS 280	276	158	5.8	TBC	TBC

Mégane Sport Tourer 5dr estate £18,915–£24,615 ★★★½☆
Stylish and refined estate car is still bland like the hatch. Smaller than its predecessor. **LxWxH** 4626x1814x1457 **Kerb weight** 1409kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 TCe 140	138	127	9.8	42.2-44.8	TBC
1.5 Blue dCi 115	113	118	11.1	56.5-61.4	TBC

Scenic 5dr MPV £21,715–£26,455 ★★★½☆
Good-looking MPV riding on 20in wheels, but overall a bland car to drive. **LxWxH** 4406x1866x1653 **Kerb weight** 1428kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 TCe 140	138	121	10.1	40.4-41.5	TBC
1.8 dCi 120	118	TBC	TBC	TBC	TBC

Grand Scenic 5dr MPV £23,515–£28,255 ★★★½☆
Good-looking seven-seat MPV is bland to drive and the third row seats are tight. **LxWxH** 4634x1866x1655 **Kerb weight** 1495kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 TCe 140	138	118	11.4	39.8-40.9	TBC
1.8 dCi 120	118	120	12.1	TBC	TBC

Captur 5dr SUV £15,725–£22,065 ★★★★☆
Jacked-up Clio is among the better downsized options. Stylish and fluent-riding. **LxWxH** 4122x1778x1566 **Kerb weight** 1184kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
0.9 TCe 90	87	106	13.2	44.1-45.6	TBC
1.3 TCe 130	128	124	10.2	42.8-44.1	TBC
1.3 TCe 150	148	130	9.5	42.8-43.5	TBC
1.5 dCi 90	87	106	13.1	51.3-53.2	TBC

Kadjar 5dr SUV £20,595–£29,995 ★★★★☆
Fine value, practical, decent to drive and good-looking, but the Qashqai is classier. **LxWxH** 4449x1836x1607 **Kerb weight** 1306kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 TCe 140	138	119	10.1-10.7	41.5-44.1	TBC
1.6 TCe 160	158	127	9.2	42.8	TBC
1.5 dCi 115	112	112-113	11.7-11.9	55.4-60.1	TBC

Koleos 5dr SUV £27,495–£31,495 ★★★½☆
Koleos name returns and is a vast improvement on before, but no class leader. **LxWxH** 4672x2063x1678 **Kerb weight** 1540kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 dCi 175	169	126	10.7	38.2	TBC
2.0 dCi 175 4WD X-Tronic	169	125	9.5	36.2	TBC

ROLLS-ROYCE

Wraith 2dr coupé £224,823–£280,223 ★★★★½
An intimate and involving Rolls. Not as grand as some, but other traits make it great. **LxWxH** 5285x1947x1507 **Kerb weight** 2360kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.6 V12	624	155	4.6	19.8	327

Dawn 2dr open £266,055–£302,655 ★★★★½
Essentially as above, except with a detuned engine and in elegant convertible form. **LxWxH** 5295x1947x1502 **Kerb weight** 2560kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.6 V12	563	155	5.0	19.6	330

Ghost 4dr saloon £227,423–£262,823 ★★★★☆
'Affordable' Rolls is a more driver-focused car than the Phantom. Still hugely special. **LxWxH** 5399x1948x1550 **Kerb weight** 2360kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.6 V12	563	155	4.9-5.0	19.8-20.0	327-329

Phantom 4dr saloon £362,055 ★★★★★
Phantom takes opulent luxury to a whole level. **LxWxH** 5762x2018x1646 **Kerb weight** 2560kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.75 TV12	563	155	5.3-5.4	20.3	318-319

Cullinan 4dr SUV £250,000 ★★★★☆
Big, bold new 4x4 begins the next era for the brand, with a model that convinces. **LxWxH** 5341x2164x1835 **Kerb weight** 2730kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
6.75 TV12	563	155	5.2	18.8	341

SEAT

Mii 5dr hatch £11,900–£12,420 ★★★½☆
Not as desirable or plush as the Up but nearly as good to drive. **LxWxH** 3557x1643x1474 **Kerb weight** 929kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 60	59	99	14.4	50.4-53.3	TBC
1.0 75	74	106	13.2	49.6-51.4	TBC

Ibiza 5dr hatch £15,495–£21,645 ★★★★½
Reinvigorated Ibiza is more mature and takes the class honours from the Fiesta. **LxWxH** 4059x1780x1444 **Kerb weight** 1091kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 MPI 80	79	106	14.6	45.6-48.7	TBC
1.0 TSI 95	93	113	10.9	47.9-53.3	TBC
1.0 TSI 115	113	121	9.3	44.1-50.4	TBC
1.6 TDI 95	93	113	7.5	55.4-60.1	TBC

Leon 5dr hatch £18,260–£30,980 ★★★★☆
A creditable effort and a notable improvement in form, with plenty of niche appeal. **LxWxH** 4282x1816x1459 **Kerb weight** 1202kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 115	113	121	9.8	46.3-50.4	TBC
1.5 TSI EVO 130	128	126	9.4	42.2-46.3	TBC
1.5 TSI EVO 150	148	134	8.2	40.9-48.7	TBC
2.0 TSI 190	188	142	7.2	38.7-40.4	TBC
2.0 TSI Cupra	288	150	6.0	35.8-38.7	TBC
1.6 TDI 115	113	122	9.8	49.6-55.4	TBC
2.0 TDI 150	148	134	8.4	TBC	TBC

Leon ST 5dr estate £19,255–£34,370 ★★★★☆
Good-looking and responsive hatchback-turned-estate. **LxWxH** 4549x1816x1454 **Kerb weight** 1236kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 115	113	122	10.1	45.6-50.4	TBC
1.5 TSI EVO 130	128	129	9.5	41.5-46.3	TBC
1.5 TSI EVO 150	148	134	8.2	40.4-48.7	TBC
2.0 TSI 190	188	144	7.3	38.7-39.8	TBC
2.0 TSI Cupra	288	155	5.2	32.1-33.6	TBC
1.6 TDI 115	113	122	10.6	53.3-55.4	TBC

Arona 5dr SUV £17,145–£25,170 ★★★★☆
Seat's second SUV doesn't disappoint, with it taking charge of the class dynamically. **LxWxH** 4138x1780x1543 **Kerb weight** 1165kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 95	93	107	11.2	45.6-48.7	TBC
1.0 TSI 115	113	113	9.8-10.0	44.1-46.3	TBC
1.5 TSI EVO 150	148	127	8.3	44.8-48.7	TBC
1.6 TDI 95	93	107	11.9	49.6-56.5	TBC
1.6 TDI 115	113	115	10.3	50.4-57.6	TBC

Ateca 5dr SUV £21,940–£34,120 ★★★★½
Seat's first SUV is very good. So good, in fact, it's a Qashqai beater. **LxWxH** 4363x1841x1601 **Kerb weight** 1280kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 EcoTSI 115	113	114	11.0	42.8-42.8	TBC
1.5 TSI EVO 150	148	123	8.6	33.6-41.5	TBC
2.0 TSI 190 4Drive	187	132	7.9	32.5-33.6	TBC
1.6 TDI 115	113	114	11.5	44.1-54.3	TBC
2.0 TDI 150	148	122	9.0	46.3-50.4	TBC
2.0 TDI 190 4Drive	187	132	7.5	TBC	TBC

Alhambra 5dr MPV £27,590–£38,325 ★★★★☆
This cheaper version of the VW Sharan is spacious, versatile and good to drive. **LxWxH** 4854x1904x1730 **Kerb weight** 1755kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 TSI 150	148	124	9.9	33.2-35.8	TBC
2.0 TDI Ecomotive 150	148	123-124	10.2-10.3	38.7-44.1	TBC

Tarraco 5dr SUV £28,335–£38,055 ★★★★☆
Seat's largest SUV brings a hint of youthful exuberance to a practical category. **LxWxH** 4735x1839x1674 **Kerb weight** 1845kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 TSI EVO 150	148	125	9.7	35.3-37.2	TBC
2.0 TSI 4Drive 190	188	131	8.0	29.7-31.0	TBC

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
2.0 TDI 150	148	126	9.8	37.2-47.1	TBC
2.0 TDI 4Drive 150	148	123	9.8	37.2-39.8	TBC
2.0 TDI 4Drive 190	188	130	8.0	37.2-38.2	TBC

SKODA

Citigo 3dr hatch £8890–£11,890 ★★★½☆
A Czech take on the city car is more fun to drive than its plain-Jane exterior suggests. **LxWxH** 3597x1641x1478 **Kerb weight** 854kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 MPI 60 GreenTech	59	100	13.9	54.3-55.4	115-118
1.0 MPI 75 GreenTech	74	107	13.1	53.3	119-120

Fabia 5dr hatch £12,260–£18,835 ★★★½☆
Comfortable, affordable, easy-to-drive and attractive, but no more so than its rivals. **LxWxH** 4009x1958x1452 **Kerb weight** 1151kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 MPI 60	58	98	16.6	50.4	127
1.0 MPI 75	73	104	14.9	48.7-49.6	128-130
1.0 TSI 95	94	114	10.8	50.4-51.3	124-127
1.0 TSI 110	108	121	9.6	49.6-51.4	125-128
1.0 TSI 110 DSG	108	120	10.1	47.1-47.9	133-136

Fabia Estate 5dr estate £14,160–£19,070 ★★★★☆
Far more practical, majoring on boot space while doing what a good Skoda should. **LxWxH** 4271x1958x1473 **Kerb weight** 1182kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 MPI 75	74	105	15.2	49.6	128-130
1.0 TSI 95	94	115	10.9	50.4-51.4	124-128
1.0 TSI 110	108	122	9.7	49.6-51.4	125-129
1.0 TSI 110 DSG	108	121	10.2	47.1-47.9	134-136

Scala 5dr hatch £18,595–£23,315 ★★★★☆
Undercuts rivals on price and ushers in a sharp new design language for Skoda. **LxWxH** 4362x1793x1471 **Kerb weight** 1381kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 115	113	125	9.8	44.8-49.6	TBC
1.5 TSI 150	148	136	8.2	40.9-45.6	TBC
1.6 TDI 115	113	124-125	10.1-10.3	49.6-57.7	TBC

Octavia 5dr hatch £18,315–£31,170 ★★★★☆
Does comfort and practicality like no other. Good, frugal engines too. **LxWxH** 4670x1814x1461 **Kerb weight** 1225kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 115	113	126	9.6-9.7	45.6-50.4	126-141
1.4 TSI 150	148	136	7.8-7.9	44.1-48.7	132-145
2.0 TSI 190	188	147	7.3	40.9	155-156
2.0 TSI 245 vRS	241	155	6.4	38.2-38.7	165-168
1.6 TDI 115	113	126	9.8	53.3-58.9	126-139
2.0 TDI 150	148	135	8.1	53.3-56.5	132-139
2.0 TDI 184 vRS	182	142-145	7.6-8.1	44.8-50.4	146-164

Octavia Estate 5dr estate £19,515–£31,495 ★★★★☆
Class-leading amount of space and practicality. Comfortable, too. **LxWxH** 4667x1814x1465 **Kerb weight** 1247kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 115	113	124-125	9.8	42.8-48.7	131-149
1.5 TSI 150	148	134	7.9-8.0	42.8-46.3	137-149
2.0 TSI 190	188	143	7.4	35.3-39.8	160-182
2.0 TSI 245 vRS	241	155	6.5	37.1-38.2	168-172
1.6 TDI 115	113	124-125	9.8-9.9	51.4-56.5	131-144
2.0 TDI 150	148	132-134	8.2-8.3	52.8-53.3	140-149
2.0 TDI 150 4x4	148	130	8.1	47.9-51.4	143-153
2.0 TDI 150 4x4 Scout	148	129	8.8	44.8	164
2.0 TDI 184 vRS	182	135-140	7.7-8.2	43.5-49.6	151-170

Superb 5dr hatch £23,905–£38,365 ★★★★☆
Another great Czech value option that's big on quality and space if not on price. **LxWxH** 4861x1864x1468 **Kerb weight** 1340kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 TSI 150	148	137	8.3-8.5	40.9-45.6	141-157
2.0 TSI 190	188	148	7.7	35.3-38.2	TBC
2.0 TSI 272 4X4	270	155	5.5	32.8	194
1.6 TDI 120	118	128	10.5-10.6	52.3	142
2.0 TDI 150	148	135-137	8.5-8.6	50.4-52.3	140-146
2.0 TDI 190	187	145	8.3	50.4	147
2.0 TDI 190 4X4	187	143	8.0	44.8	166

Superb Estate 5dr estate £25,185–£39,965 ★★★★☆
Even more commendable than above, primarily thanks to its enormous boot. **LxWxH** 4856x1864x1477 **Kerb weight** 1365kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 TSI 150	148	135	8.4-8.6	39.2-43.5	146-163
2.0 TSI 190	188	142	7.7	35.3-37.7	TBC
2.0 TSI 272 4X4	270	155	5.6	32.5	197-198
1.6 TDI 120	118	127-128	10.6-10.7	49.6	148-150
2.0 TDI 150	148	132-135	8.6-8.8	49.6-52.3	142-150
2.0 TDI 190	187	TBC	TBC	48.7	151-152
2.0 TDI 190 4X4	187	142	7.4	43.5	170-171

Kamiq 5dr SUV £17,700–£25,130 ★★★½☆
Skoda's supermini platform has birthed a practical but predictable compact crossover. **LxWxH** 4241x1793x1553 **Kerb weight** 1251kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 70	94	112	11.1	44.8-55.3	116-143
1.0 TSI 85	114	120-121	9.9-10.0	41.5-53.3	120-154
1.5 TSI 110	148	131-132	8.3-8.4	TBC	TBC
1.6 TDI 85	114	119-120	10.2-10.4	51.3-58.9	126-153

Karoq 5dr SUV £21,945–£33,375 ★★★★☆
Yeti replacement may not have its forebear's quirkiness, but it's brilliant otherwise. **LxWxH** 4382x1841x1603 **Kerb weight** 1265kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.0 TSI 115	113	116	10.6	40.4-44.1	146-159
1.5 TSI 150	148	126	8.1-8.3	38.2-41.5	154-167
1.5 TSI 150 4x4	148	121	9.1	34.4-34.9	183-186
1.6 TDI 115	113	116	11.0-11.1	46.3-49.6	149-159
2.0 TDI 150	148	127	9.0	49.6-50.4	147-150
2.0 TDI 150 4x4	148	121	8.8	42.8-44.8	165-173

Kodiaq 5dr SUV £25,775–£42,895 ★★★★☆
Skoda's first seven-seat SUV is a viable alternative to a traditional MPV. **LxWxH** 4697x1882x1676 **Kerb weight** 1430kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.5 TSI 150	148	123	9.3	36.2-37.7	165-176
1.5 TSI 150 4x4	148	120-122	9.5-9.6	31.7-33.2	194-202
2.0 TSI 190 4x4	188	TBC	TBC	30.0-31.7	201-205
2.0 TDI 150	148	123	9.8	44.8-46.3	161-165
2.0 TDI 150 4x4	148	120-122	9.4-9.6	38.7-42.8	172-190
2.0 TDI 190 4x4	187	130	8.3	38.7-39.2	188-191
2.0 BiTDI 239 4x4 vRS	237	136	7.0	35.3	211

BIG FAT QUIZ ABOUT CARS ANSWERS

1 Tortoise
2 Bertha
3 Francesco Baracca
4 Gmünd, Austria
5 Luigi Chinetti (1932-49), Hurley Haywood (1977-94) – 17 years
6 Both were designed by Aurelio Lampredi
7 Pierre Alexandre Darracq
8 Land, Sea, Air
9 Michelin X, Citroën 2CV
10 Boca Raton airport. It has never been recovered
11 It was powered by a Jaguar engine
12 It had a diesel engine
13 Peugeot
14 Claude Johnson
15 Ssangyong
16 Lella Lombardi. She scored 0.5 points in the 1975 Spanish Grand Prix after the race was shortened from 75 to 29 laps
17 Stirling Moss in a Jaguar C-Type at Reims in 1952
18 Brooklands in Weybridge, Surrey, which opened in 1907
19 Shelsley Walsh Hillclimb, founded in 1905
20 KGB colonel
21 He is the oldest person ever to take part in a World Championship Grand Prix, coming sixth at Monaco in 1955, aged 55
22 Peugeot claimed the right to all three-digit numbers with a zero in the middle
23 He drove the race solo
24 Horch, DKW, Wanderer and Audi
25 They were shaped to accommodate a helmet
26 Above the occupants' heads
27 Craig Breedlove, Bonneville Salt Flats, between 1963 and 1965
28 He lost control and crashed his car after taking the chequered flag
29 2013 Australian Grand Prix. It was won by Kimi Räikkönen, Lotus E21
30 1922 Lancia Lambda
31 1922 Lancia Lambda
32 A Luftwaffe bomb fell on the only prototype on Dieppe docks as it waited to go home
33 It was and remains the only transversely mounted V16 used in a road car
34 40
35 It had two cylinders
36 1962 Oldsmobile Jetfire
37 Gilbern
38 EMW
39 Porsche
40 Jensen FF

41 Ferguson P99 in which Stirling Moss won the 1961 Oulton Park Gold Cup
42 She was reputedly the model for the Rolls-Royce Spirit of Ecstasy mascot
43 Lancia LC2 Group C racer
44 I'm In Love With My Car by Queen
45 Dan Gurney: Porsche, Brabham and Eagle
46 1931
47 It has two engines and four-wheel drive
48 Butzi
49 Honda and Goodyear
50 1973

SMART

Fortwo 3dr hatch/open £21,195–£23,930 ★★★☆☆
Pricey, EV-only two-seater has urban appeal but is short on performance. **LxWxH** 2695x1663x1555 **Kerb weight** 1085kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
Electric Drive	79	81	11.5-11.8	TBC	0

Forfour 5dr hatch £21,690–£22,285 ★★★☆☆
Four doors give the Smart more mainstream practicality. Still expensive, though. **LxWxH** 3495x1665x1554 **Kerb weight** 1200kg

Electric Drive	79	81	12.7	TBC	0

SSANGYONG

Tivoli 5dr SUV £14,495–£21,495 ★★★½☆
Trails the Duster as the best-value small crossover - but not by much. **LxWxH** 4195x1795x1590 **Kerb weight** 1270kg

1.6 128	126	99-106	11.0-12.0	35.3-38.2	TBC
1.6d 115	113	107-109	12.0	45.3-54.3	TBC

Tivoli XLV 5dr SUV £19,745–£22,245 ★★★½☆
Now grown in size for more practicality but that doesn't increase the Tivoli's appeal. **LxWxH** 4440x1798x1635 **Kerb weight** 1405kg

1.6 128	126	99-106	11.0-12.0	34.9-37.2	TBC
1.6d 115	113	107-109	12.0	42.8-51.4	TBC

Korando 5dr SUV £19,995–£31,995 ★★★☆☆
Competitive towing capabilities and generous kit, but still lacks dynamics. **LxWxH** 4450x1870x1629 **Kerb weight** 1610kg

1.5 GDI-Turbo	161	118-120	12.0	TBC	TBC
1.6L 2WD	133	112	12.0	48.7	TBC
1.6L 4WD	133	112	12.0	43.5	TBC

Musso 5dr SUV £25,131–£35,031 ★★★☆☆
Practical pick-up has a refined engine and direct steering, but ride needs refinement. **LxWxH** 5095x1950x1840 **Kerb weight** 2155kg

2.2d 181	178	115-121	12.2	TBC	TBC

Rexton 5dr SUV £28,995–£38,995 ★★★½☆
A vast improvement. Better on the road but without ditching its agricultural roots. **LxWxH** 4850x1960x1825 **Kerb weight** 2102kg

2.2d 181	178	115	11.3-11.9	TBC	TBC

Turismo 5dr MPV £21,495–£27,995 ★★★☆☆
Incredibly ungainly but offers huge real estate for the money. **LxWxH** 5130x1915x1850 **Kerb weight** 2115kg

2.2d 178	175	108-116	TBC	TBC	TBC

SUBARU

Impreza 5dr hatch £24,310–£25,010 ★★★☆☆
Appealing hatchback has been steadily improved but still feels old-fashioned. **LxWxH** 4415x1740x1465 **Kerb weight** 1374kg

1.6i	112	112	12.4	35.9	TBC
2.0i	153	127	9.8	TBC	TBC

Levorg 5dr estate £30,010 ★★★☆☆
Impressively practical but only offered with an automatic gearbox and one trim. **LxWxH** 4690x1780x1490 **Kerb weight** 1568kg

1.6i	167	130	8.9	TBC	TBC

XV 5dr SUV £25,310–£28,510 ★★★☆☆
No-nonsense crossover doesn't quite make enough sense. **LxWxH** 4450x1780x1615 **Kerb weight** 1355kg

1.6i	112	109	13.9	35.3	TBC
2.0i	154	120	10.4	TBC	TBC

Forester 5dr estate £30,000–£32,500 ★★★☆☆
Solid, spacious and wilfully unsexy. A capable 4x4 nonetheless. **LxWxH** 4610x1795x1735 **Kerb weight** 1488kg

2.0i 150	148	118-119	10.6-11.8	32.2	TBC

Outback 5dr estate £29,995–£33,010 ★★½☆☆
Acceptable in isolation but no class leader. **LxWxH** 4815x1840x1605 **Kerb weight** 1612kg

2.5i	172	130	10.2	33.0	TBC

BRZ 2dr coupé £27,025–£28,510 ★★★★★
The GT86's half-brother looks great in Subaru blue. Cheaper, too. **LxWxH** 4240x1775x1320 **Kerb weight** 1242kg

2.0i	197	130-140	7.6-8.2	33.3	TBC

SUZUKI

Celerio 5dr hatch £8999–£10,499 ★★★½☆
Pleasing to drive, cheap to buy and decent to sit in. No-nonsense and likeable for it. **LxWxH** 3600x1600x1540 **Kerb weight** 835kg

1.0 K10C Dualjet	66	96	13.0	58.8	TBC

Ignis 5dr hatch £11,849–£14,849 ★★★★☆
Cute and rugged-looking 4x4 city car capable of tackling roads bereft of asphalt. **LxWxH** 3700x1660x1595 **Kerb weight** 855kg

1.2 Dualjet	87	106	11.8	52.9	TBC
1.2 Dualjet SHVS	87	106	11.4	54.1	TBC
1.2 Dualjet SHVS 4x4	87	103	11.1	54.1	TBC

Jimny 3dr SUV £15,499–£17,999 ★★★½☆
Charming 4x4 is capable and affordable but retains its dynamic foibles. **LxWxH** 3645x1645x1725 **Kerb weight** 1135kg

1.5 VVT	100	90	11.9	32.2-35.8	178-198

Swift 5dr hatch £12,499–£18,499 ★★★½☆
Given mature looks, more equipment and a hybrid powertrain, but it's no class leader. **LxWxH** 3840x1735x1495 **Kerb weight** 890kg

1.2 Dualjet	87	111	11.9	55.4	115
1.2 Dualjet SHVS 4x4	87	105	12.6	49.7	128
1.0 Boosterjet	108	118-121	10.0-10.6	49.6-51.8	123-136
1.4 Boosterjet Sport	138	130	8.1	47.1	135

Baleno 5dr hatch £13,249–£16,249 ★★★½☆
Suzuki's family-sized hatchback makes use of clever little engines. **LxWxH** 3995x1745x1470 **Kerb weight** 920kg

1.0 Boosterjet	108	118-124	11.0-11.4	46.8-52.4	TBC

Vitara 5dr SUV £16,999–£25,649 ★★★½☆
Utterly worthy addition to the class drives better than most. **LxWxH** 4175x1775x1610 **Kerb weight** 1075kg

1.0 Boosterjet	108	111	11.5-12.5	39.4-45.9	139-162
1.4 Boosterjet	136	124	9.5-10.2	36.6-43.6	146-174

S-Cross 5dr SUV £17,499–£26,099 ★★★½☆
A worthy crossover if not a class leader. Refreshed looks give a lease of life. **LxWxH** 4300x1785x1585 **Kerb weight** 1160kg

1.0 Boosterjet	108	106-112	11.0-12.4	404-44.9	120-131
1.0 Boosterjet Allgrip	108	109	12.0	39.2	127
1.4 Boosterjet Allgrip	136	124	10.2	37.7-38.8	141

TESLA

Model S 5dr hatch £82,190–£96,790 ★★★★½
Large range makes it not only a standout EV but also the future of luxury motoring. **LxWxH** 4978x1963x1445 **Kerb weight** 2108kg

Long range	602	155	4.1	TBC	0
Performance	602	155	2.4	TBC	0

Model 3 4dr saloon £42,990–£56,490 ★★★★☆
Lowest-price, biggest-volume Tesla yet arrives in the UK after wooing the US. **LxWxH** 4694x1849x1443 **Kerb weight** 1726kg

Standard range plus	235	140	5.3	TBC	0
Long range	346	145	4.4	TBC	0
Performance	449	162	3.2	TBC	0

Model X 5dr SUV £87,190–£101,390 ★★★★½
A genuine luxury seven-seat electric SUV which also has a large range. **LxWxH** 5036x2070x1684 **Kerb weight** 2459kg

Long range	602	155	4.7	TBC	0
Performance	602	155	2.8	TBC	0

TOYOTA

Aygo 3dr hatch £9695–£14,595 ★★★☆☆
Impactful styling does a lot to recommend it, but not as refined nor as practical as some. **LxWxH** 3455x1615x1460 **Kerb weight** 840kg

1.0 VVT-i	71	99	13.8	45.8-57.7	TBC

Yaris 5dr hatch £13,515–£26,295 ★★★½☆
Stylish interior but ultimately a scaled-down version of bigger Toyotas. **LxWxH** 3495x1695x1510 **Kerb weight** 975kg

1.0 VVT-i	67	96	15.3	61.1-61.4	TBC
1.5 VVT-i	108	108	11.0-11.2	54.3-57.6	TBC
1.5 VVT-i Hybrid	71	102	11.8	67.3-76.3	TBC
1.8 VVT-i GRMN	206	143	6.3	TBC	TBC

C-HR 5dr SUV £21,880–£29,170 ★★★★☆
Coupé-shaped crossover certainly turns heads and impresses on the road. **LxWxH** 4360x1795x1565 **Kerb weight** 1320kg

1.2 Turbo	112	114-118	10.9-11.1	39.7-41.5	TBC
1.2 Turbo AWD	112	111	11.4	34.0-34.4	TBC
1.8 VVT-i Hybrid	119	105	11.0	55.3-57.6	TBC

Corolla 5dr hatch £21,300–£30,340 ★★★★☆
Rebranded hatch has rolling refinement, interior ambience and affable handling. **LxWxH** 4370x1790x1435 **Kerb weight** 1340kg

1.2 VVT-i	114	124	9.3	39.2-44.8	128-132
1.8 VVT-i Hybrid	122	111	10.9	55.3-62.7	76-83
2.0 VVT-i Hybrid	180	111	7.9	50.4-54.2	89

Corolla Sports Tourer 5dr estate £22,575–£30,345 ★★★★☆
More practical estate bodystyle proves just as capable with hybrid power. **LxWxH** 4650x1790x1435 **Kerb weight** 1440kg

1.2 VVT-i	114	124	9.6	41.5-44.1	128-132
1.8 VVT-i Hybrid	122	111	11.1	57.6-62.7	76-83
2.0 VVT-i Hybrid	180	111	8.1	53.2	89

RAV4 5dr SUV £29,635–£36,640 ★★★☆☆
A solid option but ultimately outgunned by Korean competition. **LxWxH** 4605x1845x1675 **Kerb weight** 1605kg

2.5 Hybrid	194	112	8.4	48.7-50.4	TBC
2.5 Hybrid AWD	194	112	8.4	47.8-48.7	TBC

Land Cruiser 5dr SUV £34,690–£54,040 ★★★½☆
A real go-anywhere vehicle. Totally rugged and available with seven seats. **LxWxH** 4335x1885x1875 **Kerb weight** 2010kg

2.8 D-4D	171	109	12.1-12.7	27.4-31.0	TBC

GT86 2dr coupé £27,285–£31,795 ★★★★½
Almost the most fun you can have on a limited budget. Splendid. **LxWxH** 4240x1775x1320 **Kerb weight** 1247kg

2.0i	197	130-140	7.6-8.2	32.8-33.2	TBC

Supra 2dr coupé £52,695–£54,000 ★★★★☆
Brings welcome muscle, fun and variety to the affordable sports car class. **LxWxH** 4379x1292x1854 **Kerb weight** 1541kg

3.0i	335	155	4.3	34.5	TBC

Prius 5dr hatch £24,245–£28,350 ★★★★☆
Better all round compared with its predecessors. Challenging looks, though. **LxWxH** 4540x1760x1470 **Kerb weight** 1375kg

1.8 VVT-i Hybrid	120	112	10.6	60.1-61.4	TBC

Prius Plug-in Hybrid 5dr hatch £31,695–£33,895 ★★★★☆
Plug-in version is clever and appealing. Seems more comfortable in its skin. **LxWxH** 4645x1760x1470 **Kerb weight** 1530kg

1.8 VVT-i Hybrid	120	101	11.1	235.4	TBC

Prius+ 5dr MPV £27,830–£30,175 ★★★☆☆
Expensive, old and ugly variant of the Prius, but can carry seven. **LxWxH** 4645x1775x1575 **Kerb weight** 1500kg

1.8 VVT-i Hybrid	132	103	11.3	47.0-48.7	TBC

VAUXHALL

Adam 3dr hatch £13,850–£15,700 ★★★☆☆
Certainly looks the part, but there are better superminis ahead of it. **LxWxH** 3698x1720x1484 **Kerb weight** 1101kg

1.2i 70	69	103	14.9	43.5-44.1	TBC

Corsa 3dr/5dr hatch £11,730–£19,735 ★★★½☆
Refined, stylish and practical, but its engines aren't so good. **LxWxH** 4021x1736x1479 **Kerb weight** 1141kg

1.4i 75	74	101	15.5	42.2-43.5	TBC
1.4i 90	88	109	13.2	38.2-42.8	TBC
1.4i Turbo 100	98	115	11.0	42.8-43.5	TBC
1.4i Turbo 150	148	129	8.9	40.4-42.2	TBC

Astra 5dr hatch £18,900–£26,030 ★★★★☆
Good handling and nice engines, but its working-class roots still show through. **LxWxH** 4370x1809x1485 **Kerb weight** 1244kg

1.0i Turbo 105	103	121	10.5	45.6-47.9	TBC
1.4i Turbo 125	123	127	8.6	43.5-45.6	TBC
1.4i Turbo 150	148	134	7.8	38.2-44.1	TBC
1.6 CDTi 110	108	124	10.2	55.4-58.9	TBC
1.6 CDTi 136	134	127	9.0	48.7-57.6	TBC

Astra Sports Tourer 5dr estate £20,350–£24,680 ★★★★☆
More composed and practical than the hatchback. **LxWxH** 4702x1809x1510 **Kerb weight** 1273kg

1.0i Turbo 105	103	121	11.0	45.6-47.9	TBC
1.4i Turbo 125	123	127	9.0	43.5-45.6	TBC
1.4i Turbo 150	148	134	8.2	37.7-44.1	TBC
1.6 CDTi 110	108	121	10.7	54.3-58.9	TBC
1.6 CDTi 136	134	127	9.5	47.9-57.6	TBC

Insignia Grand Sport 5dr hatch £19,940–£37,620 ★★★★☆
The good-looking and tech-filled Insignia makes an attractive proposition. **LxWxH** 4897x1863x1455 **Kerb weight** 1714kg

1.5 Turbo 140	138	130	9.3	42.8-44.1	TBC
1.5 Turbo 165	162	138	8.4	38.7-44.1	TBC
1.6 Turbo 200	198	146	7.2	36.7-39.8	TBC
1.6 Turbo D 110	108	127	10.9	55.4-57.6	TBC
1.6 Turbo D 136	134	126-131	9.9-10.2	47.1-54.3	TBC
2.0 Turbo D 170	167	139-140	8.2-8.4	43.5-51.4	TBC
2.0 BiTurbo D 210 4x4	207	144	7.4-7.5	36.7	TBC

Insignia Sports Tourer 5dr estate £21,500–£39,120 ★★★★☆
The practical version of the Insignia that aims to take the fight to premium rivals. **LxWxH** 4986x1863x1514 **Kerb weight** 1487kg

1.5 Turbo 140	138	129	9.6	40.9-42.8	TBC
1.5 Turbo 165	162	135	8.6	37.7-42.8	TBC
1.6 Turbo 200	198	144	7.4	36.2-39.2	TBC
1.6 Turbo D 110	108	125	111.1	53.3-55.4	TBC
1.6 Turbo D 136	134	127-132	10.1-10.5	46.3-52.3	TBC
2.0 Turbo D 170	167	137-139	8.4-8.6	42.2-49.6	TBC
2.0 BiTurbo D 210 4x4	207	144	7.4-7.5	36.2-36.7	TBC

Crossland X 5dr SUV £17,710–£23,080 ★★★½☆
Vauxhall's small SUV is competent enough but lacks any real character. **LxWxH** 4212x1765x1605 **Kerb weight** 1245kg

1.2i 83	81	105	14.0	42.2-44.1	TBC
1.2i Turbo 110	108	117	10.6	39.8-46.3	TBC
1.2i Turbo 130	128	128	9.1	42.2-44.1	TBC
1.5 Turbo D 102	101	111	9.9	55.4-58.9	TBC

Mokka X 5dr SUV £20,640–£25,840 ★★★½☆
Compact and competent but lacks any persuasive qualities. **LxWxH** 4275x1780x1658 **Kerb weight** 1394kg

1.4 Turbo 140	138	119-122	9.3-10.1	34.4-36.7	TBC
1.4 Turbo 140 4x4	138	116	9.3	34.4-39.2	TBC
1.6 CDTi 136	134	117-118	9.3-10.3	43.5-50.4	TBC

Grandland X 5dr SUV £23,410–£34,930 ★★★☆☆
Does well to disguise its 3008 roots but too bland to stand out in a congested segment. **LxWxH** 4477x1811x1630 **Kerb weight** 1350kg

1.2 Turbo 130	128	117	10.9-11.1	37.7-42.8	TBC
1.5 Turbo D 130	128	116	11.3	49.6-53.3	TBC
2.0 Turbo D 177	175	133	9.1	42.8-45.6	TBC

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Combo Life 5dr MPV £20,130–£22,230 ★★★½☆
Van-based people carrier is usable, spacious and practical, if not very pretty to look at. **LxWxH** 4403x1841x1921 **Kerb weight** 1430kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.2 Turbo 110	108	109	11.9	38.2-40.9	TBC
1.5 Turbo D 100	99	107	12.7	42.8-47.9	TBC
1.5 Turbo D 130	128	115	10.6	47.1-49.6	TBC

VOLKSWAGEN

Up 3dr/5dr hatch £9825–£23,650 ★★★★☆
It's no revolution, but VW's hallmarks are in abundance. **LxWxH** 3600x1428x1504 **Kerb weight** 926kg

1.0 60	59	100	14.4	53.3-54.3	TBC
1.0 75	74	106	13.2-13.5	51.4-53.3	TBC
1.0 90	88	114	9.9	54.3-55.4	TBC
1.0 115	113	119	8.8	49.6-50.4	TBC
e-Up	81	80	12.4	TBC	0

Polo 5dr hatch £14,330–£23,155 ★★★★☆
A thorough going-over makes it more mature, but the Polo is still a bit boring. **LxWxH** 4053x1946x1461 **Kerb weight** 1105kg

1.0 65	64	102	15.5	47.1-48.7	TBC
1.0 80	78	106	15.4	46.3-48.7	TBC
1.0 TSI 95	93	116	10.8	44.8-52.3	TBC
1.0 TSI 115	113	124	9.5	44.8-49.6	TBC
2.0 TSI GTI 200	197	147	6.7	38.7-39.8	TBC
1.6 TDI 80	79	109	12.9	53.3-55.4	TBC
1.6 TDI 95	93	115	10.8	53.3-55.4	TBC

Golf 3dr/5dr hatch £18,765–£35,635 ★★★★½
Does exactly what everyone expects. Still the king of the family car. **LxWxH** 4258x1790x1492 **Kerb weight** 1206kg

1.0 TSI 85	83	112	11.9	48.7-50.4	TBC
1.0 TSI 115	113	123	9.8	41.5-57.6	TBC
1.5 TSI EVO 130	128	130	9.1	44.1-46.3	TBC
1.5 TSI EVO 150	148	134	8.3	42.2-45.6	TBC
2.0 TSI 245 GTI Performance	241	154-155	6.2	36.7-37.7	TBC
2.0 TSI 300 4Motion R	296	155	4.6-5.1	32.5-32.8	TBC
1.6 TDI 115	113	123	10.2-10.5	50.4-55.4	TBC
2.0 TDI 150	148	133-134	8.6	50.4-52.3	TBC
2.0 TDI 184 GTD	181	143-144	7.4-7.5	48.7-52.3	TBC
e-Golf	134	93	9.6	TBC	0

Golf Estate 5dr estate £21,345–£36,835 ★★★★½
Practical load-lugging estate doesn't erode the well-rounded Golf package. **LxWxH** 4567x1799x1515 **Kerb weight** 1295kg

1.0 TSI 115	108	TBC	TBC	41.5-44.8	TBC
1.5 TSI EVO 130	128	131	9.5	43.5-47.1	TBC
1.5 TSI EVO 150	148	135	8.7	41.5-44.8	TBC
2.0 TSI 300 4Motion R	296	155	4.8	32.5-32.8	TBC
1.6 TDI 115	113	124	10.7	49.6-57.6	TBC
2.0 TDI 150	148	134-135	8.9	50.4-52.3	TBC
2.0 TDI 184 GTD	181	143-144	7.8-7.9	47.9-49.6	TBC

Golf SV 5dr MPV £21,000–£29,320 ★★★★☆
Probably the least appealing member of the Golf family but still resolute. **LxWxH** 4338x2050x1578 **Kerb weight** 1335kg

1.0 TSI 85	83	110	13.0	47.1-47.9	TBC
1.0 TSI 115	113	119	11.3	41.5-43.5	TBC
1.5 TSI EVO 130	128	126	9.6	41.5-45.6	TBC
1.5 TSI EVO 150	148	132	8.8	40.9-42.8	TBC
1.6 TDI 115	113	119	11.0	48.7-55.4	TBC
2.0 TDI 150	148	130	9.2	49.6-52.3	TBC

Passat 4dr saloon £23,495–£33,575 ★★★★☆
Lands blows on rivals with its smart looks, civilised refinement, quality and usability. **LxWxH** 4767x2083x1476 **Kerb weight** 1367kg

1.5 TSI EVO 150	148	135	8.6	43.5-47.1	TBC
1.6 TDI 150	148	135	8.9	49.6-53.3	TBC
2.0 TDI 190	188	146	8.1	49.6-50.4	TBC

Passat Estate 5dr estate £25,095–£35,175 ★★★★☆
All the Passat's redeeming features in spacious, practical estate form. **LxWxH** 4767x2083x1516 **Kerb weight** 1395kg

1.5 TSI EVO 150	148	135	8.6	38.7-44.8	TBC
1.6 TDI 150	148	135	8.9	49.6-53.3	TBC
2.0 TDI 190	188	146	8.1	47.9-51.4	TBC

Arteon 4dr saloon £33,320–£40,425 ★★★½☆
VW's flagship saloon is well-made and luxurious but rather bland to drive. **LxWxH** 4862x1871x1450 **Kerb weight** 1505kg

1.5 TSI EVO 150	148	137	8.9	39.2-40.4	TBC
2.0 TSI 190	187	149	7.5	TBC	TBC
2.0 TSI 272 4Motion	270	155	5.6	32.5-33.2	TBC
2.0 TDI 150	148	137	9.1	49.6-52.3	TBC
2.0 TDI 190	187	148	8.0	48.7-50.4	TBC
2.0 TDI 190 4Motion	187	145	7.8	43.5-44.8	TBC
2.0 BiTDI 240 4Motion	236	152	6.5	TBC	TBC

Touran 5dr MPV £24,045–£30,870 ★★★★☆
Dull overall, but it's a capable MPV, well-made and hugely refined. **LxWxH** 4527x1829x1659 **Kerb weight** 1436kg

1.0 TSI 115	113	119	11.3	39.2-41.5	TBC
1.5 TSI EVO 150	148	130	8.9	37.2-39.8	TBC
1.6 TDI 115	113	118	11.4	47.9-51.4	TBC
2.0 TDI 150	148	128-129	9.3	TBC	TBC

Sharan 5dr MPV £29,115–£39,350 ★★★★½
Full-sized seven-seater offers versatility, space, VW desirability and tidy handling. **LxWxH** 4854x1904x1720 **Kerb weight** 1703kg

	Power (bhp)	Top speed (mph)	0-60/62mph	Economy (mpg)	CO_2 (g/km)
1.4 TSI 150	148	123-124	9.9	31.4-35.8	TBC
2.0 TDI 115	113	114	12.6	TBC	TBC
2.0 TDI 150	148	123-124	10.3	39.8-43.5	TBC
2.0 TDI 177	175	132-136	8.9	39.8-40.4	TBC

T-Cross 5dr SUV £16,995–£26,740 ★★★★½
Compact crossover delivers a classy, substantial feel on UK roads. **LxWxH** 4108x1760x1584 **Kerb weight** 1270kg

1.0 TSI 95	93	112	11.5	46.3-47.9	TBC
1.0 TSI 115	113	120	10.2	43.5-45.6	TBC
1.6 TDI 95	93	111	11.9	49.6-53.3	TBC

T-Roc 5dr SUV £19,270–£31,050 ★★★★☆
VW's junior SUV is beguiling and sophisticated. It drives rather well, too. **LxWxH** 4234x1992x1573 **Kerb weight** 1270kg

1.0 TSI 115	113	116	10.1	43.5-44.8	TBC
1.5 TSI EVO 150	148	127	8.3	38.7-42.2	TBC
1.5 TSI EVO 150 4Motion	148	127	8.4	34.0-34.9	TBC
2.0 TSI 190 4Motion	187	134	7.2	34.0-34.4	TBC
1.6 TDI 115	113	116	10.3	49.6-50.4	TBC
2.0 TDI 150	148	124	8.6	48.7-50.4	TBC
2.0 TDI 150 4Motion	148	124	8.7	45.6-46.3	TBC

Tiguan 5dr SUV £23,990–£38,790 ★★★★☆
An improvement on the previous model and will continue to sell by the bucket load. **LxWxH** 4486x1839x1654 **Kerb weight** 1490kg

1.5 TSI EVO 130	128	119	10.2	39.8-40.9	TBC
1.5 TSI EVO 150	148	124	9.2	36.7-38.2	TBC
2.0 TSI 190 4Motion	188	131	7.9	39.2-42.8	TBC
2.0 TSI 230 4Motion	228	142	6.3	29.7-30.4	TBC
2.0 TDI 150	148	125-127	9.3	44.8-47.9	TBC
2.0 TDI 150 4Motion	148	124-125	9.3	39.2-42.2	TBC
2.0 TDI 190 4Motion	187	131	7.9	38.7-39.2	TBC

Tiguan Allspace 5dr SUV £30,095–£41,040 ★★★★☆
Has all the Tiguan's sensibility and refinement, now with the bonus of seven seats. **LxWxH** 4486x1839x1654 **Kerb weight** 1490kg

1.5 TSI EVO 150	148	123	9.5	35.3-35.8	TBC
2.0 TSI 190 4Motion	188	130	7.9	TBC	TBC
2.0 TDI 150	148	124-126	9.8	43.5-44.1	TBC
2.0 TDI 150 4Motion	148	123-124	9.9	38.2-38.7	TBC
2.0 TDI 190 4Motion	187	130	8.6	38.2-38.7	TBC

Touareg 5dr SUV £49,095–£58,295 ★★★★☆
Hints of ritziness and sportiness don't impinge on this functional luxury SUV's appeal. **LxWxH** 4878x2193x1717 **Kerb weight** 1995kg

3.0 V6 TSI 340	335	155	5.9	24.6-25.9	TBC
3.0 V6 TDI 231	228	135	7.5	33.2-34.9	TBC
3.0 V6 TDI 286	282	148	6.1	32.8-34.9	TBC

VOLVO

V40 5dr hatch £23,995–£29,820 ★★★★☆
Not perfect, but handsome, well-packaged, pragmatic and likeable. **LxWxH** 4370x2041x1470 **Kerb weight** 1417kg

2.0 D2	116	118	10.5	47.9-56.5	TBC
2.0 D3	145	130	8.4	47.1-55.4	TBC
2.0 T2	119	118	9.8	38.2-42.8	TBC
2.0 T3	148	130	8.3	37.2-42.8	TBC

V40 Cross Country 5dr hatch £28,070–£29,819 ★★★★☆
Handsome hatchback gets a rugged makeover but loses some of its likeable nature. **LxWxH** 4369x2041x1439 **Kerb weight** 1428kg

2.0 D3	145	118	8.5	47.9-55.4	TBC
2.0 T3	148	130	8.5	37.2-40.9	TBC

S60 4dr saloon £37,935–£56,105 ★★★★☆
Fresh-faced saloon now sits comfortably among the ranks of its German peers. **LxWxH** 4761x1916x1437 **Kerb weight** 1616kg

2.0 T5	248	145	6.5	35.3-39.8	152-155
2.0 T8 TwinEngine	390	155	4.6	122.8-176.5	42
2.0 T8 Polestar Engineered	399	155	4.4	104.5	48

V60 5dr estate £32,410–£41,460 ★★★★½
Spacious and comfortable, with a characterful, Scandi-cool design. **LxWxH** 4761x1916x1427 **Kerb weight** 1729kg

2.0 D3	147	127	9.5	45.6-55.4	TBC
2.0 D4	187	137	7.6	46.3-55.4	TBC
2.0 T5	246	145	6.7	34.0-38.7	TBC

V60 Cross Country 5dr estate £38,270 ★★★★☆
Brings extra ride height, all-wheel drive and off-road body cladding. **LxWxH** 4784x1916x1499 **Kerb weight** 1792kg

2.0 D4	187	130	8.2	42.8-47.9	TBC

S90 4dr saloon £36,120–£58,555 ★★★★☆
Volvo's mid-sized exec majors on comfort, style and cruising ability. **LxWxH** 4963x2019x1443 **Kerb weight** 1665kg

2.0 T4	185	130	8.7	33.2-37.7	TBC
2.0 T5	248	140	6.8	33.2-37.7	TBC
2.0 D4	185	140	8.2	43.5-50.4	TBC
2.0 D5 PowerPulse AWD	228	145	7.0	39.2-43.5	TBC
2.0 T8 Twin Engine AWD	310	155	4.8	97.4-117.7	TBC

V90 5dr estate £38,120–£60,555 ★★★★☆
luxury estate takes on the 5 Series and the E-Class. Comfy and a good cruiser. **LxWxH** 4936x2019x1475 **Kerb weight** 1679kg

2.0 T4	185	130	8.9	33.2-37.7	TBC
2.0 T5	248	140	6.7	33.2-37.7	TBC
2.0 D4	185	140	8.5	43.5-50.4	TBC
2.0 D5 PowerPulse AWD	228	145	7.2	39.2-43.5	TBC
2.0 T8 Twin Engine AWD	310	155	4.8	97.4-117.7	TBC

V90 Cross Country 5dr estate £43,020–£57,935 ★★★★☆
Volvo's large comfy estate given a jacked-up, rugged makeover. **LxWxH** 4936x2019x1543 **Kerb weight** 1826kg

2.0 D4 AWD	185	130	8.8	40.4-43.5	TBC
2.0 D5 PowerPulse AWD	228	140	7.5	38.2-40.9	TBC
2.0 T5 AWD	250	140	7.4	30.4-32.5	TBC
2.0 T6 AWD	310	140	6.3	30.4-32.5	TBC

XC40 5dr SUV £29,910–£38,020 ★★★★☆
Volvo's take on the crossover aims to rival BMW, Mercedes and Audi. **LxWxH** 4425x1910x1658 **Kerb weight** 1626kg

T3	152	124	9.4	36.7-39.8	TBC
T4 AWD	185	130	8.5	32.8-35.3	TBC
T5 AWD	243	140	6.5	31.0-34.0	TBC
D3	145	124	9.8	44.1-51.4	TBC
D3 AWD	145	124	7.5	42.8-44.8	TBC
D4 AWD	185	130	7.9	39.8-44.1	TBC

XC60 5dr SUV £38,320–£60,670 ★★★½☆
Looks like a small XC90 and carries on where the old one left off. A good, capable cruiser. **LxWxH** 4688x1999x1658 **Kerb weight** 1781kg

2.0 D4 AWD	185	127	8.4	36.7-44.8	TBC
2.0 D5 PowerPulse AWD	228	137	7.2	35.3-40.4	TBC
2.0 T5 AWD	247	137	6.8	30.1-34.0	TBC
2.0 T8 Twin Engine	310	140	5.3	83.1-100.9	TBC

XC90 5dr SUV £51,860–£72,795 ★★★★☆
Clever packaging, smart styling, good to drive: Volvo's closest thing to a class-leader. **LxWxH** 4950x2008x1776 **Kerb weight** 1961kg

2.0 D5 PowerPulse AWD	228	137	7.8	34.0-36.7	TBC
2.0 T5 AWD	250	134	7.9	26.9-30.4	TBC
2.0 T6 AWD	310	143	6.5	26.2-28.8	TBC
2.0 T8 Twin Engine	310	140	5.6	74.3-83.1	TBC

VUHL

05 0dr open £59,995–£89,995 ★★★★☆
Mexican track-day special has a pleasingly pragmatic and forgiving chassis. **LxWxH** 3718x1876x1120 **Kerb weight** 725kg

2.0 DOHC Turbo	285	152	3.7	TBC	TBC
2.3 DOHC Turbo RR	385	158	2.7	TBC	TBC

WESTFIELD

Sport 2dr coupé £19,950–£35,800 ★★★★☆
Sport Turbo is very quick and fun but not a patch on the Caterhams. **LxWxH** TBC **Kerb weight** TBC

1.6 Sigma	135	TBC	TBC	TBC	TBC
1.6 Sigma	155	TBC	TBC	TBC	TBC
2.0 Duratec	200	TBC	TBC	TBC	TBC
2.0 Ecoboost	252	TBC	TBC	TBC	TBC

Mega 2dr coupé £14,999–£15,595 ★★★½☆
Mega engines make it rapid, but not as fun as Caterham's R range. **LxWxH** TBC **Kerb weight** TBC

1.3 Suzuki Hyabusa	177	136	3.0	TBC	TBC
2.0 VTEC S2000	240	TBC	TBC	TBC	TBC

ZENOS

E10 0dr coupé £26,995–£39,995 ★★★★½
The latest in a long line of mid-engined British marvels. Expect a dedicated following. **LxWxH** 3800x1870x1130 **Kerb weight** 700kg

2.0 Ecoboost S	250	145	4.0	TBC	TBC
2.3 Ecoboost R	350	155	3.0	TBC	TBC

WHAT'S COMING WHEN

Kia Soul EV
On sale now, price £33,795

The first examples of Kia's second-generation Soul EV are soon to land in dealers, after the electric crossover went on sale in July. Alongside a substantially updated design and a tech revamp inside, the Soul gets far more power and a much bigger all-electric range. It puts out 201bhp and 295lb ft of torque, with the range claimed to be up to 280 miles. New fully independent rear suspension is aimed at improving ride and handling, too. Unlike before, the EV is the only Soul that will be offered in the UK.

DECEMBER

Audi RS6 Avant, RS7, **BMW** X3 PHEV, **DS** 3 Crossback EV, **Ford** Puma, **Honda** E, **Jaguar** XF facelift, **Kia** Soul EV, **Mazda** CX-30, **Mercedes-AMG** GLE 53 Coupé, **Mercedes-Benz** GLB, **Mini** GP, **Peugeot** 208 and e-208, **Porsche** Macan Turbo, Taycan, **Vauxhall** Grandland X PHEV

2020

Alfa Romeo Giulia, Giulia QV, Stelvio, Tonale, **Aston Martin** DBX, Vantage Roadster, **Audi** A1 Citycarver, A3, A3 E-tron, A5 facelift, E-tron GT, E-tron Sportback, Q4 E-tron, Q5 facelift, RS Q3, RS Q3 Sportback, RS Q8, RS3, **Bentley** Bentayga facelift, Continental GT V8 and GTC V8, Flying Spur, **BMW** 2 Series, 2 Series Active Tourer, 2 Series Gran Coupé, 4 Series, iX3, M2 CS, M3, M4, M8 Gran Coupé, **Borgward** BX5, BX7, **Chevrolet** Corvette, **Citroën** C4, C5 Aircross PHEV, **Cupra** Formentor, Leon, **DS** 8, **Ferrari** F8 Tributo, Roma, SF90 Stradale, **Fiat** 500, 500e, **Ford** Kuga PHEV, Mustang hybrid, Mustang Mach-E, **Honda** Jazz, **Hyundai** i10, i20 N, Kona N, **Jaguar** F-Type facelift, XJ, **Jeep** Cherokee, Compass PHEV, Gladiator, Renegade PHEV, **Land Rover** Defender, **Maserati** Alfieri, Ghibli facelift, Levante facelift, Quattroporte facelift, **Mazda** MX-30, **McLaren** 750LT, Speedtail, **Mercedes-AMG** GLA, GLB 35, GLE 63, GLS 63, **Mercedes-Benz** E-Class facelift, EQA, EQB, EQS, EQV, GLA, GLE Coupé, GLE PHEV, Maybach SUV, S-Class L, **Mini** Electric, John Cooper Works GP, **Mitsubishi** Mirage facelift, Outlander PHEV, **Nissan** Qashqai, X-Trail, **Peugeot** 3008 PHEV, 508 Peugeot Sport Engineered, e-2008, **Pininfarina** Battista, **Polestar** 2, **Rolls-Royce** Ghost, **Renault** Captur, Zoe, **Seat** El-Born, Leon, Mii Electric, **Skoda** e-Citigo, Octavia, Octavia vRS, Vision iV, **Subaru** Forester, Levorg, **Tesla** Cybertruck, Model Y, **Toyota** Corolla GR, Mirai, RAV4 PHEV, Yaris, Yaris GR, **Uniti** One, **Vauxhall** Corsa, Corsa-e, Mokka-e, Mokka X, **Volvo** XC40 EV, **VW** Arteon shooting brake, e-Up, Golf, Golf GTD, Golf GTE, Golf GTI, Golf R, ID 3, ID 4, Up facelift, Up GTI facelift, T-Roc

Matt Prior

TESTER'S NOTES

Our testers get through more tyres than choccy Digestives these days

Finally I've found a film car chase that doesn't annoy me, and in the most unlikely of places.

Movie car chases have, in recent times, given me a problem. You'll know why: somebody will be driving flat out when a close-up shows them shifting down a gear, or slamming their foot hard on the throttle, as if they wouldn't already be doing it.

This almost-but-not-quite-happens in Fast & Furious: Hobbs and Shaw, but it doesn't seem to matter. F&F: H&B has car chases in but isn't even pretending to be a car film, which I think is the important thing.

Despite having Fast & Furious in the title, it's a pure brain-out action flick with ludicrous punching, kicking and explosions, and instead of a drag race where two cars take turns to nudge ahead of each other like never happens in real life. So it features a pick-up truck turned into a flamethrower, and a tow truck drifting. While attached to a helicopter. Which is airborne.

Ridiculous stuff, but it's very well done, and clearly lots of it was actually created in genuine live action stunts with real drivers, flames and a helicopter. Fair play.

> "It features a tow truck drifting. While attached to a helicopter. Which is airborne"

■ Movie makers aren't alone in trying to make cars look dramatic on camera. We're at it too, and thankfully, I think cars are more receptive to being driven dramatically – which means in pictorial or video standards, with their tyres on fire – than ever. Cars have more power and torque than ever, modern steering is light and quick, and today's high body rigidity lets cars respond to inputs brilliantly quickly.

The only downside is that some modern performance cars get through tyres at an alarming rate. Up to about a decade ago, we used to plan the first day of our annual Britain's Best Driver's Car feature as a day for judges to assess cars, because tyres would be new at the start of it all, and a car's steering would be sharper because we hadn't scrubbed any of the tyre shoulder. But that was about the only thing we worried about when it came to tyres.

Gradually, though, cars arrived that needed spare tyres to arrive with them, and at some point we'd be swapping over a 'used' set. Today, when we do this test, about half the field come with at least one spare set of tyres.

Perhaps this is down to increasing vehicle weights, maybe it's having more power, I'm sure higher-performance rubber, and probably a combination of all those things. The additional demands we place on cars on track owing to video won't help, either, but still, sometimes the wear rate is a bit much. Not just for us, but if you do track days, too.

Feels odd to want a set of tyres that have longer durability and worse grip levels (and, in turn, the argument would be, less safety), but here we are.

■ I hope you've enjoyed reading the mag this year as much as we've enjoyed putting it together. It remains a pleasure and a privilege to report to you, however you find us – in print, online or on video. Have a very happy Christmas filled with love, peace and hopefully a spot of driving enjoyment too. And see you in a couple of weeks for our 24 December issue.

Fast & Furious: for once, disbelief is happily suspended

GET IN TOUCH
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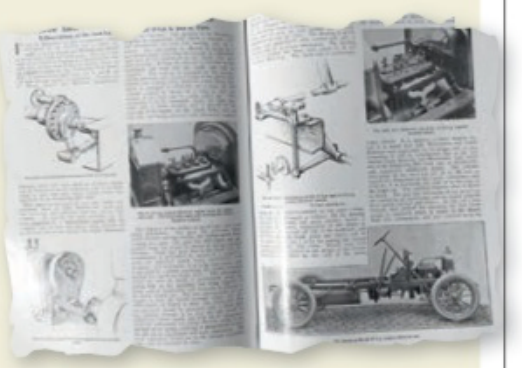
ESTABLISHED 1895

The Autocar



Excellent early Skodas

6 March 1909

THE LAURIN & KLEMENT trim on modern Skodas revives the firm's original name of 1895. That means Skoda is actually older than the Czech nation; the L&K range we detailed in 1909 was Bohemian.

"This car is not quite so well known in England as it deserves to be," we enthused, recalling the "excellent way" that a 14-16hp had previously taken us on a road trip.

This car, like the 10-12hp, used a four-cylinder engine (the 10hp was a two-pot), with a three-speed gearbox driving the rear axle via a propeller shaft. The ladder frame was fabricated from pressed steel.

"On the wheel are the throttle and spark advance levers; a foot-operated throttle is on the extreme offside of the footboard, and next to it comes the brake and clutch, and on the extreme nearside is a pedal for putting the exhaust cut-out into action." Simply clever.

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DMS MCLAREN 720S (**EVO** SEPTEMBER 2018)
"THIS IS A CAR THAT NOT ONLY DESERVES YOUR FULL ATTENTION, BUT REQUIRES IT"

DMS 911 TURBO (ULTIMATE SUPERCAR SPRING 2019**)**
"BALLISTIC PERFORMANCE IN AN EMINENTLY USEABLE PACKAGE"

DMS F10 M5 (**EVO** DEC '15)
"730BHP, 200MPH+ TYRE-SHREDDING MONSTER"

DMS MCLAREN 650S (**EVO** OCT '15)
"REAL MUSCULARITY AND THE STRENGTH OF THE MID-RANGE IS STAGGERING"

DMS M2 (**EVO** SEPT '15)
"MORE POWER DOES MEAN MORE FUN"

BELOW IS A SMALL SELECTION OF OUR MORE POPULAR UPGRADES:

AUDI
AUDI RS6 4.0 T V8 » 700+BHP (+DE-LIMIT)
AUDI RS6 V10 » 680+BHP (+DE-LIMIT)
AUDI 2017 R8 V10 » 650BHP (+DE-LIMIT)
AUDI R8 V10 » 592+BHP (+DE-LIMIT)
AUDI RS4 / RS5 » 480+ BHP (+DE-LIMIT)
AUDI RS3 / TTRS (8V MK2) » 480+ BHP
AUDI S3 / GOLF R » 378+ BHP (+DE-LIMIT)
AUDI 3.0TDI (ALL MODELS) » 315+ BHP
AUDI 3.0 BI-TDI (ALL MODELS) » 400+ BHP
AUDI Q7 / A8 4.2 TDI » 400+ BHP

BMW
F90 M5 » 750+BHP (+DELIMIT)
M2 COMPETITION » 530BHP (+DE-LIMIT)
M2 » 435BHP (+DE-LIMIT)
M3/M4 » 540+BHP (+DE-LIMIT)
M5/M6 » 730+BHP (+DE-LIMIT)
X5M/X6M » 730+BHP (+DE-LIMIT)
X5M50D/X6M50D » 450+BHP
M140I / 240I / 340I / 440I » 430+BHP
M135I/M235I » 410+BHP
i8 » 415BHP
120I / 220I / 320I / 420I » 275+BHP
118D / 218D / 318D » 225BHP
120D / 220D / 320D / 420D » 40BHP
330I / 430I » 320+BHP
335I / 435I » 410+BHP
330E » 320+BHP
330D / 430D / 530D / 730D » 360BHP
335D / 435D / 535D » 395+BHP
550I / 650I » 555+BHP (+DE-LIMIT)
640D / 740D » 395BHP (+DE-LIMIT)
X530D / X630D » 360BHP

MERCEDES-BENZ
A35 AMG » 350+BHP (+DE-LIMIT)
E63S W213 » 700+BHP (+DE-LIMIT)
A45 / CLA45 AMG » 430+BHP
AMG GT / GTS » 560BHP (+DE-LIMIT)
C43 / E43 / GLC43 AMG » 455BHP
C63 / 63S 4.0T AMG » 620+BHP
C63 6.3 AMG » 530+BHP
500 4.7 BITURBO (ALL MODELS) » 498+BHP
63 AMG BITURBO (ALL MODELS) » 700+BHP
55 AMG KOMPRESSOR » 600+BHP
(+DE-LIMIT & SUSPENSION LOWERING)
S65 » 780BHP (+DE-LIMIT)
SL65 AMG » 690BHP (+DE-LIMIT)
SL65 BLACK » 720BHP (+DE-LIMIT)
200 CDI (ALL MODELS) » 173BHP
220 CDI (ALL MODELS) » 230BHP
250 CDI (ALL MODELS) » 260BHP
C300 HYBRID » 285BHP
C300E » 350BHP
C400/E400 » 400BHP
350 CDI (ALL MODELS) » 315BHP
420/450 CDI (ALL MODELS) » 358BHP

ALL 2019 RANGE ROVERS AVAILABLE
RR 50SC / SVO / SVR STAGE 1 » 600+BHP
RR 50SC / SVO / SVR STAGE 2 » 650+BHP
2.2 DIESEL (ALL MODELS) » 220+BHP
2.0 DIESEL (ALL MODELS) » 225/265BHP
VELAR 30SI6 » 420BHP
RR 4.4 TDV8 » 395 BHP
RR TDV6 / SDV6 3.0D » 305/350 BHP
DEFENDER 2.2 » 180BHP

PORSCHE
991.2 GT2 RS » 780+BHP
TURBO / S (ALL MODELS) » 750+BHP
991.2 CARRERA (ALL MODELS) » 500+BHP
991.2 CARRERA S (ALL MODELS) » 500+BHP
991.2 CARRERA GTS (ALL MODELS) » 540+BHP
991 GT3 3.8 (ALL MODELS) » 490+BHP
991 GT3 RS 4.0 (ALL MODELS) » 525+BHP
997.2 GT3 RS » 480 BHP
997 GT2 RS » 670+ BHP
997 TURBO / S 3.8 INC PDK » 611 BHP
997 TURBO 3.6 » 625+ BHP
997 CARRERA S PDK » 400+ BHP
997 CARRERA GTS » 435 BHP
996 TURBO / GT2 » 600+ BHP
BOXSTER / CAYMAN 718 GTS » 420+BHP
BOXSTER / CAYMAN 718 S » 420+BHP
BOXSTER / CAYMAN 718 » 380+BHP
BOXSTER / CAYMAN 981 GT4 » 430+BHP
BOXSTER / CAYMAN 981 GTS » 375+BHP
BOXSTER / CAYMAN 981 S » 345+BHP
CAYENNE TURBO 4.8 (ALL) » 650+ BHP
CAYENNE 4.2 DIESEL » 450+ BHP
CAYENNE / MACAN 3.0 DIESEL » 318+ BHP
MACAN S » 420+BHP
MACAN GTS » 440+BHP
MACAN TURBO (ALL MODELS) » 480+BHP
PANAMERA TURBO » 600+ BHP
PANAMERA DIESEL » 305+ BHP

EXOTIC / MISC
WRAITH / DAWN » 720+BHP
FERRARI 488 PISTA » 780+BHP
FERRARI 488 » 750+BHP
FERRARI PORTOFINO » 680+BHP
FERRARI LUSSO T » 710+BHP
FERRARI CALI T » 680BHP
FERRARI F12 » 780+BHP
FERRARI 430 » 525 BHP
MCLAREN MP4 /650S » 720 BHP
MCLAREN 570/S » 680+BHP
MCLAREN 600LT » 680+BHP
MCLAREN 675LT » 750BHP
MCLAREN 720S » 840+BHP
MCLAREN SENNA » 875+BHP
GALLARDO LP560 » 608+BHP
HURACAN LP610 » 650BHP
AVENTADOR » 750+BHP
BENTLEY 4.0 T V8 » 700+BHP
BENTLEY GT / F-SPUR » 700BHP
GT SPEED / SUPERSPORT » 720+BHP
BENTAYGA W12 » 720+BHP
MASERATI 3.0S PETROL » 470 BHP
MASERATI 3.0 DIESEL » 312 BHP

FURTHER OPTIONS
As well as installing the above engine tunes, we are able to further individualise your car with additional features. Some of which are shown here. Contact us for further details.

Exhaust tuning (Pop's & crackles)
Customized driving modes
Gearbox tuning
Sport dials calibration
Exhaust butterfly control

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Because they blend in, we stand out.

Because them, us.

SEAT

Official fuel consumption for the Ibiza range mpg (litres/100km) combined: 42.2 (6.7) – 61.4 (4.6). Combined CO_2 emissions 98 – 111 (g/km).

Figures shown are for comparability purposes; only compare fuel consumption and CO_2 figures with other vehicles tested to the same technical procedures. These figures may not reflect real life driving results, which will depend upon a number of factors including the accessories fitted (post-registration), variations in weather, driving styles and vehicle load. There is a new test used for fuel consumption and CO_2 figures (known as WLTP). The CO_2 figures shown, however, are based on a calculation designed to be equivalent to the outgoing (NEDC) test cycle and will be used to calculate vehicle tax on first registration. For more information, please see seat.co.uk/wltp or consult your SEAT Dealer.